STUDENTS WITH DISABILITIES IN GENERAL EDUCATION SETTINGS: GENERAL EDUCATION TEACHER PREPARATION

by

MARY JO ANDERSON

B.A., College of St. Scholastica, 1977
M.S., Kansas State University, 2001

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

Department of Special Education, Counseling, and Student Affairs
College of Education

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Abstract

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The primary purpose of this study was to determine what is being taught in elementary education teacher preparation programs regarding how to teach students with disabilities who are educated entirely or in part in general education settings. The goal was to provide information to IHE's considering more comprehensive and specialized training for elementary preservice general educators by making critical program adjustments in order to prepare effective educators in the context of classrooms in which students with disabilities receive some of their education, and importantly, to inform those adjustments.

This study explored levels to which preferred knowledge and skills for including students with disabilities in elementary general education classrooms are taught and assessed. It also looked at differences among state licensing and university graduation coursework

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Major Professor
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Lastly, I offer special thanks to my parents, Grace and Jerry Wood, who taught me what I needed to know to be successful, gave me life experiences that guided me toward teaching others, and inspired me to set goals and then to achieve them.

Dedication

This manuscript is dedicated to my parents, Grace Marie and Gerald D. Wood, who have taught me the value of hard work and have given me the courage to persevere. And to my three daughters Geri, Cassi and Rawni, who have always encouraged me to accomplish this goal. We have done this together. Their faith in me and their reminders about why I wanted to take this journey have carried me to this destination and I will be forever grateful.

CHAPTER 1 - Students With Disabilities in General Education Settings: General Education Teacher Preparation

Introduction

Over time, the provision of special education services to children with disabilities has moved from settings isolated from children without disabilities to services in public school classrooms, many times in the same classrooms with non-disabled peers. Since the 1700s, people with disabilities and their advocates have embarked on a long, often controversial, journey to secure the same rights granted to *all* citizens by the Constitution of the United States. Consequently, many monumental changes in the way individuals with disabilities were and are treated have taken place, among them, the right to a public education. "Legislation has led the special education community, from the national level to the school level, to promote progress toward equality, integration, and independence" (Hu, 2000, p. 1). These changes have had a significant impact on the teaching skills needed by teachers who share the responsibility of educating students with disabilities.

In 1975, Public Law 94-142, the Education for All Handicapped Children Act (EHA), was enacted, promising that students with disabilities would have a *free and appropriate public education* (FAPE) in the *least restrictive environment* (LRE). As a result, children with disabilities were *mainstreamed*, spending time in general education settings. This movement has remained, although refined and clarified over time. In 1986, the Assistant Secretary of Education at that time, Madeleine C. Will, formally introduced the Regular Education Initiative (REI). It was monumental in that it began another new "era" in the evolution of education for students with disabilities and consequently, for educators. For the first time, mainstreaming was being accounted for and defined, placing general educators in a position of becoming more responsible

for the education of students who have special needs. This initiative presented a conception that regular education *should* take over even more of the functions traditionally assigned to special education. Historically, this was a big step toward increasing the shared responsibilities by general and special educators for educating students with disabilities. The LRE requirements of Part B of the EHA have remained with the reauthorizations of EHA, including IDEA 2004, but have been clarified by influences of REI, among others. "To the maximum extent appropriate, students with disabilities… [will] be educated with children who are not disabled **…"** (Section 1412 (a) (5), IDEA 2004). The requirements remain the same in IDEA 2004. In addition, educational accountability specified in the No Child Left Behind act of 2001 (NCLB) greatly increased pressure for general education teachers to share the task of educating *all* students, including students with disabilities. It is no longer a matter of "your students" and "my students." "All means all" (Guetzloe, 1999, p. 92). Thus, teachers must think of students with disabilities as "our students" (Harris, Kaff, Anderson & Knackendoffel, 2007) and must maximize access to meaningful instruction for all students in the general education classroom.

The quest for ways to improve education for students with disabilities resulted in more students with disabilities being served in general education and challenged teachers for several reasons: (a) the number of students identified as having disabilities and requiring special education services under IDEA is increasing (Data Accountability Center, 2004, 2007), (b) the number of students with disabilities being educated in general education classrooms rather than in self-contained or resource room settings is increasing (U.S. Department of Education, Office of Special Education Programs, Data Analysis System [DANS], OMB, 2003, p. 180), and (c) the mandate by NCLB 2001 calls for states to develop rigorous curriculum standards and assessments to measure the progress of *all* students. Some leaders in the field of special

education imply that teacher preparation may not be keeping up with current trends. Eleanor Guetzloe (1999) acknowledged it is most likely general education teachers know some teaching techniques that special educators use (e.g., cooperative teaching and direct instruction), but anyone who works with students with disabilities needs training in (a) special education procedures and laws (e.g. IEPs, due process, and evaluation), (b) learning strategies and social skills instruction, (c) classroom management of students who are disruptive, (d) therapeutic group procedures and affective education, and (e) crisis intervention. Likewise, special education teachers must understand general education policies, procedures, and curriculum and must also possess certain core teaching competencies. "… school systems across the continent are placing ever-increasing numbers of children with disabilities in the regular classroom, often without careful preparation of the students themselves, their peers, the faculty, or the environment" (Guetzloe, 1999, p. 92). Consequently, we sometimes find that students with disabilities who are included in general education do not always have meaningful access to the curriculum. As stated by Kauffman (1999, p. 246), "general education provides physical access but not instructional access for most students to the supposedly rich and varied general education curriculum offered in general education classrooms. …physical access to a place can restrict access to the instructional procedures that are most effective for students with learning problems."

Federal mandates give rise to a fundamental concern that must be addressed: how to best provide access to the general curriculum by students with disabilities (Kauffman, 1999). *All* children are expected to progress through general education curriculum and participate in district and state assessments (NCLB, 2002). To that challenge, Martha Minow writes, "teacher training is one of the most promising opportunities for improvement in providing students with disabilities genuine access to the curriculum" (2001, p. 1). Have colleges and universities made

changes to teacher education programs with the intention of preparing new teachers to provide meaningful and appropriate services to students with disabilities in their classrooms? This study investigated preservice elementary education teacher training at Institutes of Higher Education (IHE) across the United States. It compared the skills elementary teacher preparation programs provide with the skills professional literature has stated are needed for the effective inclusion of students with disabilities in general education classrooms.

Background

The number of students identified as having disabilities has increased from 1,824,969 in 1992-93 school year (SY) to 5,979,960 in the 2006-07 SY (Data Analysis System [DANS], OMB, 2003). Students with disabilities are also entering general education classrooms in increasing numbers. Until the 1997 amendments to the Individuals with Disabilities Education Act (IDEA) mandated that individuals with disabilities have access to general education curriculum, special education had been markedly isolated from general education standards, curricula and accountability (Hitchcock & Stahl, 2003). It was an entity of its own. There was little specific attention given to what was being taught or materials being used in teaching a disabled child's general education peers. IDEA 1997 produced significant changes in general classroom demographics when students with disabilities became a growing percentage of the general classroom population (Kober, Jennings, Rentner, Brand, & Cohen, 2001).

According to the 27th Annual Report to Congress in 2005, 9.07% of the school population (6-21-year-old) living in the United States was being served under IDEA in 2003 (p. 51). Students between the ages of 6 and 17 served under IDEA, Part B, as a percentage of pre-kindergarten through 12th grade public school enrollment was 11.66% (U.S. Department of Education, Office of Special Education Programs, Data Analysis System [DANS], OMB, 2003

p. 72). Of all students being served under IDEA (ages 6-21), 49.89 % spend at least 80% of the school day in the general education setting, 27.67% are in the classroom between 21 and 60 percent of the time, and 18.51 % spend less than 21 percent of their school experience in classrooms with same age peers (U.S. Department of Education, Office of Special Education Programs, Data Analysis System [DANS], OMB, 2003, p. 180). That is a total of 77.6% of school age children with disabilities who spend between 20 and 100 percent of their time in school in general education classrooms. According to 2002 data from the U.S. Department of Education Office of Special Education Programs, a total of 95.8% of children with disabilities spend some time in a general education classroom.

Overview of Current Issues

Several issues relating to increased participation in general education curriculum by students with disabilities guide this study: (a) increased numbers of students with disabilities are educated in general education classrooms, (b) the line between special education and general education is eroding, (c) since children with disabilities must learn the same curriculum as their non-disabled peers (NCLB, 2001), they must be included in opportunities to learn it, and (d) the reality of students with disabilities being served in general education classrooms creates responsibility for IHE's to make changes to their teacher education programs so that they prepare preservice teachers for current job demands.

Issue 1: *Increased numbers of students with disabilities are educated in general education classrooms.*

The number of students identified as having disabilities has increased from 1,824,969 in 1992-93 school year (SY) to 5,979,960 in the 2006-07 SY (Data Analysis System [DANS], OMB, 2003) or 305%. Students with disabilities are also entering general education classrooms

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Issue 2: *The line between special education and general education is eroding.*

The push for inclusion under the auspices of least restrictive environment (IDEA, 1990, 1997, 2004) is eroding the traditional wall between special and regular education settings (Minow, 2001). Initially, students with disabilities were taught in institutions, isolated from social or educational interaction with others. As time passed, they were educated in special schools with their own curriculum and subsequently in special classrooms within public schools. Now most students with disabilities attend public schools and many spend large percentages of their days in general education classrooms being educated with non-disabled peers.

In response to PL 94-142, 1975, a special curriculum for students with disabilities developed to meet mandates giving these students a free and appropriate education in the least restrictive environment (Hitchcock, Meyer, Rose & Jackson, 2002). Students with disabilities were taught according to their individual achievement levels and projected rates of improvement (Hitchcock et al. 2002). Special educators taught students with disabilities, general educators taught students without disabilities, and neither had more than minimal knowledge about what the other was teaching.

When students with disabilities were finally mainstreamed into classrooms under the mandates of PL94-142 (1975), they were assigned to special education settings and spent some time in the general education classroom. Quite commonly, school time that students with disabilities spent with non-disabled peers was during non-academic classes (i.e., physical education, music, and art) and social periods such as recess and lunch. Hence, special educators continued to be responsible for academic learning and assessment of learning of students with disabilities. General educators taught and assessed progress of students without disabilities. Neither general nor special educators needed any depth of knowledge about the other or about what respective students were learning. Furthermore, Individualized Education Plan (IEP) goals

were the basis of assessment to track progress of children with special needs while curriculum standards were the basis for general education progress assessment (Hitchcock et al. 2002). Each curriculum was isolated from the other and markedly different.

The NCLB 2001 act, signed and enacted in 2002, brought monumental changes that reduced curricular differences between general and special education, thus eroding the wall between them. The same high standards and accountability demanded of students without disabilities would also apply to students who have disabilities. "The Department expects most students with disabilities to take part in regular statewide assessment either without accommodations or with appropriate accommodations that are consistent with accommodations provided during regular instruction" (Improving the Academic Achievement of the Disadvantaged Final Rule, 2006, p. 68700). Students with disabilities were expected to learn and be assessed on the same general education learning outcome standards as their non-disabled peers (Essex, 2006). As a result, general education classrooms have become the Least Restrictive Environment (LRE) for more and more students with disabilities.

The LRE provision of IDEA *does not* mandate that all students with disabilities, regardless of the nature and severity of their limitations, be placed in the general classroom (Kauffman, 1999; Kirk, Gallagher, & Anastasiow, 2000). "We have lost a clear point of reference in the debate about LRE, that point of reference being students' progress in learning, their academic achievement and social progress" (Kauffman, 1999, p. 246). "Despite the very obvious intent of the LRE and the continuum of services it provides, students with all types and levels of disabilities are being placed in the general classroom" (Singh, 2006, p. 1) and general education teachers must come into the classroom prepared to teach them.

Issue 3: *Since children with academic disabilities must learn the same curriculum as*

their non-disabled peers (NCLB 2001in Essex, 2006; Turnbull, Huerta, & Stowe, 2006)*, preservice teachers must be prepared to include them in meaningful, appropriate learning opportunities.*

Children with disabilities are expected to acquire the same general knowledge and skills as their peers, so they must have the opportunity to learn them. Their presence in general classrooms is increasing. In fact, according to statistics presented by the Department of Education, Office of Special Education Programs, Data Analysis System in 2003, 77.6% of school age children with disabilities spend between 20 and 100 percent of their time in school in general education classrooms. According to 2002 data from the U.S. Department of Education Office of Special Education Programs, a total of 95.8% of children with disabilities spend some time in a general education classroom. Thus, it is reasonable to expect preservice general education teachers to have knowledge and skills needed to teach students who have disabilities in meaningful ways.

Hitchcock et al. (2002) believed the general curriculum was still designed to reach a core group of students that excludes students with disabilities yet education laws expect *every* student to participate. For some students, successful participation in general education curriculum, as well as in state curriculum standard's assessments, is not possible without accommodations or access to information through non-traditional, alternate delivery modes. Students who cannot read printed text, for example, must be given access to the content in other ways; a student with dysgraphia or with orthopedic disabilities who has difficulty writing must be able to show teachers what he/she has learned in ways other than handwritten responses; students who are deaf must be given auditory information in another format. General education teachers who work with children with disabilities in their classrooms must have the knowledge and skills to provide

meaningful learning opportunities with appropriate accommodations so that students with disabilities can learn and teaching strategies that will allow all students to benefit. When considering this issue we must acknowledge that preservice training for general education teachers must include such content.

Issue 4: *The reality of students with disabilities being served in general education classrooms creates responsibility for IHE's to make changes to their teacher education programs so that they prepare preservice teachers for current job demands*

"All teacher candidates can expect they will have the opportunity to work with students with special needs" (Nelson, 2006, p. 486). With the change in classroom demographics and the current push to include students with disabilities in general education classrooms and accountability systems, it is critical that teacher education training programs in our IHEs prepare teachers accordingly.

> Much of the responsibility of ensuring that teachers are effective must rest with the colleges and universities that prepare them. This does not come as a surprise to those who have educated the nation's teachers. The institutions that are members of the American Association of State Colleges and Universities (AASCU) produce nearly three fifths of the beginning schoolteachers in the United States. For this reason, the presidents and chancellors of these comprehensive colleges and universities have recognized the need for and their role in ensuring the quality of teacher education programs, and the fostering of reform where needed (AASCU Task Force on Teacher Education, 1999, p. 5)

When students with disabilities are in general education classrooms, teachers must have an understanding of their unique needs and must know how to make the curriculum reachable by *all* students. A comment made while developing teacher training programs in Wisconsin between

1896 and 1899 still makes sense today in the context of our ever changing classrooms: "knowledge of the subjects to be taught was still not enough. Pupils were to be taught, not the subjects…" (Schrenker, 1997, p. 1). During the late 1800s and early 1900s, in an effort to develop the perfect teacher education program, pioneers in the field stated hopefully, "The Normal graduate" (referring to higher education teacher training graduates) "could take the reins of instruction at once with confidence. There would be an absence of blind groping for methods" (Schrenker, 1997, p. 1). Similarly, Brown, Welsh, Hill, & Cipko, (2008) stated the importance of providing preservice general education teachers adequate training to teach the students with disabilities in their classrooms with confidence.

Statement of the Study Problem

The IDEA and NCLB policies have expanded the roles and responsibilities of classroom teachers. Students with disabilities must progress through the general curriculum and take the same state standards assessments as their non-disabled peers (with the exception of a few, less than 1% in some states), hence, their placement in the "least restrictive environment" is more often becoming the regular education setting. Although there is not sufficient empirical evidence to conclude that the needs of all children can be met in the general classroom, educating disabled students no longer lies strictly in the hands of special educators (Singh, 2001). Classroom teachers must share the responsibility of educating students who have disabilities within a curriculum that is based on state learning outcome standards. In view of that, effective teachers must possess the skills and teaching competencies essential to planning and providing meaningful learning opportunities for all students. No other activity, therefore, will be more critical in the effort to improve school success for students with disabilities than ensuring that teachers and others who serve them have the necessary skills and knowledge to address their

special learning needs (Office of Special Education, U.S. Department of Education, 1994). To that end, Singh (2001) and Murry and Murry (2000) recognize the timely attention and program adjustments that must be granted to teacher preparation.

According to Murry and Murry (2000), teacher preparation programs, for both special and general educators, have recognized their obligation to provide solutions to difficulties related to teaching in general settings in which students with special needs are members. Still, many teachers seem to lack adequate knowledge about solutions that may hold promise for students with disabilities who are educated in general education classrooms (Murry & Murry, 2000). Many teachers have received little or no training about effective methods or accommodations to use with these, specific students (Smith, Tyler, Skow, Stark, & Baca, 2003). Additionally, numerous studies that have investigated teacher's own perceptions of their preparedness for teaching students with disabilities have shown that few feel adequately prepared (Kleinhammer-Tramill, 2003; National Joint Committee for Learning Disabilities, 1998; Schumm and Vaughn, 1995; Schumm and Vaughn, 1992, Singh, 2001; Trump and Hange, 1995). With the current realities for accountability, this is a matter of concern. It is essential for all educators to be prepared to meet unique needs of students with disabilities in general education settings and to provide them with meaningful access to the curriculum.

An objective of the "Highly Qualified Teacher" clause in NCLB (2002) is to ensure that "all students…have the best teachers possible. A well-prepared teacher is vitally important to a child's education" (Essex, 2006. pp. 61, 62). Interestingly, NCLB allows states to establish their own certification requirements, giving way to major inconsistencies in teacher training. According to the most recent reports of the National Association of State Directors of Teacher Education and Certification (NASDTEC) (2004), 52% of states require some coursework in

special education for the initial teaching certificate. Twenty-two percent of states have no required "special education component," and 26% did not report data. Thus, of the 37 states that reported data, 70.27% (26 states) require some special education coursework while 29.72%, or 11 out of 37 states, have no special education requirement of elementary general education preservice teachers applying for initial certification (NASTEC, 2004). Clearly, there is an inconsistency in teacher preparation requirements. It is time to explore the nature and extent of preservice teacher training as it relates to students with disabilities in the general education classroom.

Purpose and Significance of the Study

The primary purpose of this study was to survey elementary education teacher preparation programs in each state to determine the knowledge and skills required of teacher candidates with regard to teaching students with disabilities in their classrooms. These data were compared to the knowledge and skills recommended for general education teachers by The Interstate New Teacher Assessment and Support Consortium (INTASC) and National Joint Committee on Learning Disabilities (NJCLD). By examining the special education requirements in elementary teacher preparation programs this investigation identified:

1. the number of states that have a special education requirement for an initial elementary education license;
2. the number of universities among those surveyed that have special education requirements for elementary education program completers that exceed their state requirements for initial licensure;
3. the level at which special education-related skills are being taught and assessed;
4. the opinions and rationale of general education teacher preparation program faculty

about what constitutes reasonable special education skill requirements for elementary education teacher program completers;

5. whether faculty believe the training they provide is sufficient preparation for elementary general education teachers to teach students with disabilities in their classrooms;
6. whether faculty opinions influence the level at which special education skills are taught and assessed;
7. whether faculty who have special education training influence the level at which special education skills are taught and assessed;
8. whether there is a difference regarding special education training for elementary preservice teachers between colleges of education who offer a special education degree and those that do not.

The significance of the study is that its goal is to provide information to IHEs considering more comprehensive and specialized training for elementary preservice general educators by means of making critical program adjustments in order to prepare effective educators in the context of classrooms in which students with disabilities receive some of their education, and importantly, to inform those adjustments. Taking into account that NCLB has given states control over teacher licensing requirements, this investigation also sought to provide information to individuals on state licensing boards who are making these critical decisions during a time of increasing teacher expectations and diversification of classrooms. Furthermore, an estimated 157,000 teachers (Alliance for Excellent Education, 2008) are leaving the teaching field each year. If unprepared, new teachers are at risk of leaving the profession within their first year of teaching (Alliance for Excellent Teaching, 2005). This research may also contribute to studies investigating reasons for attrition, particularly with

rationale that refers to the issue of adequate preservice preparedness.

Research Questions

1. How many state departments of education require at least one special education course for an initial elementary education teaching license?
2. How many institutes of higher education require completion of additional (beyond state requirements) special education coursework in their elementary teacher preparation programs?
3. How many elementary general education teacher preparation programs have faculty trained in special education, teaching the coursework related to educating students with disabilities in general education classrooms?
4. The Intercollegiate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee on Learning Disabilities (NJCLD) have compiled a list of preferred knowledge and skills for general education teachers who share the responsibility of educating children with disabilities. Based on Bloom's taxonomy, what is the highest level at which teacher candidates in the United States are *taught* about these preferred skills?
5. Based on Bloom's taxonomy, what is the highest level at which elementary education teacher candidates in teacher training programs in the United States are *assessed* on knowledge and skills (INTASC and NJCLD) pertaining to educating children with special needs in the general classroom?
6. In which knowledge and skill areas do faculty in teacher training programs in the United States believe their elementary teacher candidates are prepared well enough to be able to provide class members who have disabilities opportunities for meaningful

participation and access to learning experiences that will bring about progress through the general curriculum?

7. Do faculty in elementary education preservice preparation programs at IHE's in the United States believe that it is reasonable to require elementary education teacher candidates to acquire *all* preferred competencies recommended by INTASC and NJCLD?
8. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *taught* and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?
9. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *assessed* and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?
10. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *taught* and whether special education trained faculty teach preservice teachers about special education related issues?
11. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *assessed* and whether special education trained faculty teach preservice teachers about special education related issues?
12. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *taught* and whether the university has a special education degree program?
13. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *assessed* and whether the university has a special education degree program?

Definition of Terms

1. *Accommodations: "*A service or support that is provided to help a student fully access the subject matter and instruction as well as to demonstrate what he or she knows" (Nolet & McLaughlin, 2000) without changing the content of instruction or learning outcomes.
2. *All students:* every student who attends public elementary schools
3. *Appropriate/meaningful participation:* Teachers have high but reasonable expectations for students with disabilities to encourage progress. Students with disabilities can access information, make meaningful contributions to class discussions and projects, can learn concepts presented to typical peers.
4. *Bloom's Taxonomy:* This taxonomy provides means with which to measure levels of thinking required with concept development and testing. During the 1990s a student of Bloom's, Lorin Anderson, and a group of cognitive psychologists "updated the taxonomy. The levels of thinking are remembering, understanding, applying, analyzing, evaluating and creating. The updated taxonomy was used in this study.
5. *EHA:* Education for All Handicapped Children's Act was landmark legislation identified as P.L. 94-142. It became effective in 1975 ensuring that students with disabilities would have a *free and appropriate public education* (FAPE) in the *least restrictive environment* (LRE).
6. *Elementary general education:* education whose primary focus is to teach children without disabilities in first through fifth or sixth grade (not in a middle school or junior high school setting).
7. *Eligible Disability:* The Individuals with Disabilities Education Improvement Act (2004) recognizes and defines 13 different disability categories and provides eligibility criteria

for each one. A child who meets criteria for one or more of the disability categories (i.e. mental retardation, speech or language impairment, specific learning disabilities, autism, speech and language, visually impaired, hearing impaired, deaf -blindness, other health impaired, emotionally disturbed, orthopedically impaired, traumatic brain injury, and multiple disability) is entitled to protection under IDEA.

8. *FAPE:* Free and Appropriate Public Education is a principle of the EHA (1975) that requires an education program for a child with disabilities designed to meet the unique needs of that child, at no extra cost to the parents or guardians. All children with disabilities, regardless of the severity of his/her disability, are guaranteed a free and appropriate public education.
9. *General education:* "… refers to the curriculum that is used with non-disabled children" (IDEA, 34 C.F.R. Appendix A to Part 300 p. 12470, 1999).
10. *Inclusion*: Students with disabilities are educated alongside same age peers in general education settings for all or a portion of the day
11. *Individuals with Disabilities Education Act* (*IDEA)*: primary federal legislation that authorizes state and local aid for special education and related services for children with disabilities; provides legal protection of education rights of students with disabilities.
12. *IHE:* Institute of higher education, for the purpose of this study, is a major university or college of education that prepares preservice teachers for a career in elementary education teaching.
13. *INTASC*: The Interstate New Teacher Assessment and Support Consortium is a "consortium of state education agencies and national educational organizations dedicated to the reform of the preparation, licensing, and on-going professional

development of teachers" (Council of Chief State School Officers, 2007).

14. *LRE:* Least Restrictive Environment is a principle of PL94-142 that mandates children with disabilities in public or private education facilities be educated, to the maximum extent appropriate, with children who do not have disabilities. Separate classes, separate schools or removal of students with disabilities from general education environments may only occur when educational needs of the student cannot be met with the use of supplementary aids and services.
15. *NJCLD:* National Joint Committee on Learning Disabilities is a "national committee of representatives of organizations committed to the education and welfare of individuals with learning disabilities. More than 350,000 individuals constitute the membership of the organizations represented by the NJCLD" (NJCLD, 2009, p. 1).
16. *NCLB 2001:* No Child Left Behind Act is a law passed by President George Bush on January 8, 2002 mandating student academic improvement. Schools must focus on accountability for results, must use proven education methods and must give parents increased participation in the education process.
17. *Preservice teacher:* individuals enrolled at universities who are studying elementary general education with the goal of becoming a public school teacher
18. *Public schools:* federal and state funded schools in the fifty states and Washington DC; Schools under the Bureau of Indian Affairs are not included for the purpose of this paper.
19. *Resource room:* classrooms where a special education program can be delivered to a student with a disability; Resource rooms are designed to provide a place where students with disabilities (whose primary placement is a general/regular classroom) can come for

part of the school day to receive special, individualized or small group instruction based on their unique needs.

20. *Regular schools:* federal and state funded public schools; * See *public schools.*
21. *Related services:* "transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education..." ([§300.24(a)] IDEA 1997)
22. *Self-contained classrooms:* In the context of this study they are classrooms in which all students have disabilities. These classrooms are in general public schools but all students assigned to them are students with disabilities. Students in these classrooms are isolated from learning alongside non-disabled peers for the majority of the school day. Students in self-contained classrooms spend less than 20% of their school day in a general education setting.
23. *Special education:* specially designed services, related services, and instruction to meet the unique needs of children who have disabilities as defined by IDEA. It includes classroom instruction, home instruction, and instruction in hospitals and institutions. This education is provided at no cost to parents.
24. *Special education requirement*: This is any content required to be taught in the general education preservice teaching program that relates to teaching students with disabilities in general education classrooms. This content may be taught as a separate class or infused into other required education classes.
25. *States:* the fifty states and the District of Columbia
26. *State assessments:* assessments developed, designed, and determined by states based on state achievement standards and students learning outcomes

27. *State educational standard/state standards:* foundation for accountability and design of state assessments; Educational standards define the knowledge and skills students should possess at critical points in their educational career.
28. *Survey study:* a research method to collect or to attempt to bring together data from a number of members of a population (sample) to determine current status of the population with respect to one or more variables.

CHAPTER 2 - A Review of the Literature

Educators at every level are witnessing and experiencing an increasing Federal role that is rapidly restructuring education in America. Schooling has evolved over time from an opportunity granted to a very few privileged individuals, to compulsory education that excluded individuals who deviated from the norm, to a time in recent years that includes all children, both non-disabled and disabled, learning side by side in general education classrooms. Assessment systems, in which no child is exempt, have been mandated by Federal legislation and teachers are accountable for all children, not just those considered "normal." Consequently, skills teachers need to meet current teaching demands are changing rapidly. Another recent trend regards teacher shortage, in part, for the reason that trained teachers are changing careers in record numbers, seeking training and employment in other professions (Alliance for Excellent Education 2005). Perhaps there is a connection to need for more training/professional development and/or the resulting lack of confidence and negative attitudes regarding the integration of students with disabilities to this trend.

In this review, literature that traces education since the 1700s provides a foundation for readers to understand the evolvement of education for students with disabilities. In light of the historical developments pertaining to educating students with disabilities this literature review also reports government funding for efforts to train teachers for new responsibilities associated with public schooling and accountability for these students. The increased accountability has had an impact on teacher confidence to meet job demands and has left teachers questioning the adequacy of their training. A body of literature identifies skills needed by individuals entering the general education teaching field and teacher attitudes regarding confidence in facets of their preservice training related to shared responsibility for the education of *all* students. This chapter

will examine both theoretical and empirical studies in the field, presented in the following sections:

1. history of education for children with disabilities,
2. efforts to prepare teachers
3. general educators' perceptions of teacher training
4. preferred skills and knowledge recommended for beginning teachers
5. summary

History of Education for Children with Disabilities

> If special education had been inserted into the stable framework of an existing school system, it might have evolved quite differently than it in fact did. The pervasive stress on isolated institutions might not have developed, and the notion of special education as a discrete enterprise separate from regular education might not have evolved. Given the lack of an existing framework and given the emphasis on a medical model, special children were simply excluded from the public schools, which had neither the desire nor the trained personnel to handle these youngsters (Winzer, 1993, pp. 63-64).

Historians speculate about the treatment of people with disabilities before the 1700s because few records were kept on individuals who differed from the established societal norms of the time, whether referring to political, religious, intellectual, or physical differences (Winzer, 1993). Information from available records concludes that in most cultures, individuals with disabilities were considered inferior. Some were looked upon as being supernatural, even divine. "Their lives were severely limited by widely held beliefs and superstitions that justified the

pervasive prejudice and callous treatment" (Winzer, 1993, p .8). Individuals with differences were set apart, destroyed, exorcised, ignored, exiled, or exploited (Hewett, 1974).

The mid 1700s brought the first systematic education for the disabled. Its establishment in England and Europe is attributed largely to the works of physician John Locke. His respected beliefs that everything could be explained, seemed to end the mysteries and superstitions related to individuals with disabilities. France was a vital contributor to the new education initiative through a broad intellectual movement known as Enlightenment. It was a period that stimulated a more rational, humane perception of individuals with disabilities (Winzer, 1993, p. 4). First, studies conducted by Jacob Rodrigue Pereire, Denis Diderot, and Abbe Charles Michel del'Epee with people who were deaf contributed to the establishment of a school for the deaf in Paris in 1760. The continued work of Valentin Hauy contributed to the opening of another such school in Paris in 1784 and the first British school for the blind in 1791. By the late 1700s, special education was an accepted part of schooling, although as with general education, was not a social norm and schooling children who had disabilities other than deafness and blindness was being given new attention.

The recognition of mental illness became a focus. Philippe Pinel, a French physician and one of the earliest psychologists, brought emphasis to mental health and society's "failure to make adequate provision for conditions essential to mental health" (Winzer, 1993, p.62). From there, more attention to mental subnormality came into focus with Jean Marc Gaspard Itard's study of a boy who grew up on his own in the woods of south-central France. Itard wanted to determine the intelligence of a boy who was deprived of education and human contact. He attempted to educate the boy who made some progress, but remained subnormal. Following the Itard study, others moved to establish care and education for individuals with mental retardation.

One of Itard's students, Edouardo Sequin from France had a fervent optimism that individuals with blindness, mental retardation and emotional disabilities could be educated or trained to become productive members of society. His premise was that learning environments had to be structured, directions clear, and rewards positive (Friend 2008). Between 1826 and 1846, several schools for individuals with mental were established in France. England began educating students with mental retardation in 1826 with the establishment of a school in Bath. In America, during the nineteenth century, education for students with disabilities evolved slowly.

The Enlightenment period in Europe influenced American views of educating the disabled. There was "an unequivocal declaration that something must be done for the weak, the dependent, the disabled…Americans readily responded to the challenge; urged on by a humanitarian philosophy, evangelical commitment, and unbounded philanthropy…" (Winzer, 1993, p. 78). Increasingly, children with disabilities were being viewed as responsibilities of the medical community. Consequently, large institutions, *separate* from common schools, sprang up throughout the populated Northeastern United States. First came schools for students who were deaf (1817), followed by schools for the blind in 1832. The 1800s brought attention to mental retardation as a separate disability under the research and advocacy of Dorthea Dix and Samuel Howe. In the mid 1800s schools for the "feeble-minded," or mentally retarded began to take their place in the history of educating citizens with disabilities. Between 1848 and 1890, fourteen states had separate institutions for students with mental retardation (Davies, 1959).

Throughout the nineteenth century, with the establishment of institutions for individuals with mental retardation and the attention given to disabilities, there was new and increased attention to sensory handicaps and children, who today would be considered psychotic, pervasively developmentally disordered or severely emotionally disturbed (Winzer, 1993). Even

though, in the late 1600s, John Locke made a distinction between mental retardation and mental illness and the corresponding treatments, a general lack of knowledge and treatment for these individuals continued. Consequently, all of these individuals were considered mentally retarded and treated/institutionalized as such.

Distinction among various types of disabilities evolved slowly over the nineteenth century. Disabilities were medically diagnosed, however, educational interests in disabilities surfaced and were influenced by religious and moral obsessions of the times, coupled with political influences. America's thrust was on industrialization and thus, special schooling in the early 1800s focused on vocational training and job skills. By the mid 1800s the 3 R's became the educational focus. "For students with differences, education isolated subgroups who could not be taught the uniform curriculum which was characteristic of the schools at that time" (Kirp, 1974 in Harvard Educational Review, 2002, p. 5). Education of students with mental retardation continued to be primarily "trade teaching." Students considered "high grade feeble minded" were taught basic reading, math, writing and spelling. Students who were deaf or blind spent their school day doing academic work and manual trade training in isolated settings. "To professional educators, it made little sense to place these students in regular classes; they needed the assistance of a kind that common schools had not previously been asked to provide" (Kirp, 1974 in Harvard Educational Review, 2002, p.5). At that time, according to Kirp (1974), the belief was that classification and isolation of subgroups helped both the students and the teachers, not recognizing the thought that isolation may limit benefits of education. He notes a survey by the National Education Association that indicated only 18.4 % of teachers preferred to teach non-grouped classes.

As the 19th century came to a close, disillusionment took hold and individuals with mental retardation once thought educable by advocates such as Dix and Howe were being perceived as untreatable. This mindset created another shift. Social attitudes toward people with disabilities declined and society started crafting ways to control population growth of individuals with disabilities. Intelligence testing was introduced in 1911 when Henry Goddard brought the Binet-Simon intelligence measure from France to the United States. Lewis Terman refined that test in 1916 and a conceptual framework for determining intelligence quotient (I.Q) was developed. Retardation could now be defined in terms of intelligence quotient. Once defined and prevalence numbers greater than expected, the 1900s brought the dominating restrictive practices.

During the first half of the 20th century the move was from educating individuals with disabilities to managing and caring for them. Institutions established and designed to protect and train individuals with mental retardation began to assume custodial roles (Friend, 2008). There was also an attempt to control the human race. Focus was on producing fewer undesirable human beings, while producing more individuals with desirable characteristics. The result: "selective breeding," a movement introduced by evolutionists like Charles Darwin, and its term, "eugenics," coined in 1883 by Sir Francis Galton.

> "Intelligence is inherited, and feeble mindedness is transmitted across generations through a recessive gene. Many immigrants seem to be feebleminded. [Remember that they often did not speak English and were not familiar with American customs, so they appeared feebleminded to some.] Because it is critical to raise the overall level of intelligence in the United States, it is important to stop people who are feeble minded from having children" (in Friend, 2008 p. 8).

Richard Dugdale's 1877 publication *The Jukes: A Study of Crime, Pauperism, Disease and Heredity* and Henry H. Goddard's 1912 publication, *The Kallikak Family: A Study in the Heredity of Feeble-Mindedness* based on genetic relationships of the Kallikaks, fueled societal support for the eugenics movement. Eugenics became the subject of legislation and laws mandating sterilization of individuals from families with histories of perceived disabilities were passed. By 1927, twenty-three states had supporting laws and eugenics was upheld by a Supreme Court ruling in the precedent setting case, *Buck vs. Bell*. Justice Oliver Wendell Holmes expressed his ruling clearly:

> We have seen more than once that the public welfare may call upon the best citizens for their lives. It would be strange if it could not call upon those who already sap the strength of the State for these lesser sacrifices, often felt too be much by those concerned, in order to prevent our being swamped with incompetence. It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit for continuing their kind. The principle that sustains compulsory vaccination is broad enough to cover cutting the Fallopian tubes…. Three generations of imbeciles is enough (*Buck v. Bell,* 1927, p 50*).*

During the second quarter of the twentieth century, the American government began focusing its control efforts on immigration. The influx of immigrants from Eastern Europe was increasing. Consequently, another trend aimed at controlling the population of "subnormal" individuals emerged and became an influence for research, legislation and public attitude. The general concern was that the number of inferior, feeble-minded immigrants entering the United States needed to be controlled. Resulting were several actions, among them legislation

concluding with the Immigration Restriction Act of 1924, intentionally designed to halt the immigration of supposedly dysgenic individuals. It actually restricted the number of individuals from each country in proportion to the 1890 census. The method was simply to scale the number of immigrants from each country in proportion to their percentage of the U.S. population in the 1890 census, when northern and eastern Europeans were the dominant immigrants. From 1924–1965 the Immigration Restriction Act restricted entry of Italians, Russians, Hungarians, and Jews into the United States (Smith, Ittenbach, & Patton, 2002) in hopes of controlling the number of "inferior stock" entering the country. During the early 1900s it was clear that disillusionment had shifted the focus from education of people with disabilities to once again casting them off and minimizing their presence in society. However, by the mid 1900s advocates for people with differences generated another period of reform centering their platforms on constitutional rights of every United States citizen and the federal government launched an increasingly more influential role in school policy and funding.

Early federal policies (late 1940s to mid 1950s) centered on students from poverty, to students who were non-English speaking, then to racially diverse students. As legislation focused on lowering the achievement gap between the "general" school population and specific sub-groups, educational needs and civil rights of disabled citizens gained attention. In 1954 the landmark, *Brown vs. Board of Education of Topeka Kansas,* the conclusion stated, "… in the field of public education, the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal." Although it was a civil rights, racial inequality case, it had implications for all students including those being taught in separate facilities or separate classrooms. President Eisenhower declared National Retarded Citizens Week in 1955 and "urged support for the National Association for Retarded Children (NARC founded in 1952)" (New

York State Education Department, 2006). Several states set aside moneys for special education programs and federal programs matched funding. Public Laws 84-825, 84-880 and 84-922 (1956) supported teacher training, diagnostic equipment for visual and hearing impairments, and vocational rehabilitation facilities. In 1957, P.L. 85-308 provided federal funding for more books for the blind and P.L. 85-926 allocated funding for advanced special education teacher training programs at colleges and universities. In the 1950s, attention to civil rights coupled with efforts to decrease education achievement gaps among various subgroups of the school population brought increasing attention to special education.

Awareness of achievement gaps and constitutional rights during the 1950s sustained and intensified attention into the 1960s and onward. The mid to late 1960s was a critical period as education and recognition of civil rights of disabled citizens moved forward. In 1965 the Elementary and Secondary Education Act (ESEA) (P.L. 89-750) was passed. ESEA's primary purpose was to strengthen and improve educational quality and opportunity in the nation's elementary and secondary schools (DeStefano & Snauwaert, 1989). It was amended eight months later with the enactment of Public Law 89-313, which authorized the first federal grant program specifically addressing needs of children and youth with disabilities (NICHY, 1997). Grants were given to state education agencies for the purpose of educating students with disabilities in state-operated schools and institutions. In 1966, ESEA's amendment, P.L. 89-750, granted locally run elementary and secondary schools money for educating students with disabilities. It became known as Title VI. Furthermore, the Bureau of Education for the Handicapped (BEH) was established to administer, implement and monitor programs for youth and children with disabilities. Additionally, it supported model programs, research teams, financial support for training special and general educators, and support personnel and parents.

The National Advisory Council (NAC), presently known as the National Council on Disabilities (NCD) was set up. In 1968 a piece of federal legislation, once again, expanded efforts to support education for children and youth with disabilities with another ESEA amendment, P.L. 90-247. The purpose of this amendment was to expand and improve special education services. Great attention was given to special education in the 1960s. Court cases inspired lawmakers to create protective mandates; litigation and legislation intertwined. Advocates brought public attention to the denied rights of students with disabilities and parents sought justice through the legal system. Consequently, numerous court decisions and state and federal laws passed since the 1960s have protected the educational rights of these individuals (NICHY, 1996). The momentum continued during the subsequent decade as parents continued to seek legal assistance that would help them clarify their rights and the rights of their children with disabilities.

Since special education laws enacted by Congress were passed to states, each state set policies to implement the laws according to their own interpretation. Inconsistencies and questions about interpretation have been handled through litigation resulting in more amendments that clarified language and changed policies. The 1970s began with another ESEA amendment that gave way to landmark legislation facilitating and shaping present-day education for students with disabilities.

Congress passed the Elementary and Secondary Education Amendments of 1970, P.L. 91-230. Public Law 91-230 consolidated into one act a number of previously separate federal grant programs related to the education of children with disabilities, including Title VI of ESEA under P.L. 89-750. This new authorization, which became known as Part B, was titled the Education of the Handicapped Act (EHA) and was the precursor to the 1975 act that would significantly expand the educational rights of children and youth with disabilities (NICHY,

1996).

Issues relating to compliance of new laws often emerged centering around interpretation of policies and bringing about even more litigation. In 1972, for example, two precedent setting cases involving students with disabilities, *Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania* (PARC) and *Mills v. Board of Education,* strengthened the advocate's pleas for federal legislative clarification of their constitutional rights. The 1972 PARC litigation ruled that all students with mental retardation in the Commonwealth of Pennsylvania must receive a free and appropriate public education and that placement in a public school class was preferable. *Mills v. Board of Education (Mills)* (1972), a class action lawsuit, ordered the Washington DC school district to educate all students including those with disabilities. The order included specific procedures to determine eligibility for special services and to resolve disagreements between families and the schools. Both *PARC* and *Mills* ruled against the school boards. As a result of these and other court cases clarifying educational rights of students with disabilities, the Federal government continued to respond with additional and revised legislative mandates (Friend, 2008).

The Education Amendments of 1974, P.L. 93-380, included significant changes to previous legislation and began a focus on full education for all children with disabilities. This was a pivotal point in educating students with disabilities, the law that "forever changed the American educational system…" (CASE, 1993, in D'Alanzo and Gerard Giordand, 1996, p. 305). An element of this law, Title VI of the ESEA, became the Education of the Handicapped Act Amendments. Procedural safeguards were put into place for use in non-discriminatory testing and evaluation, identification, and educational placement. In addition, states were to establish a timetable for achieving full educational opportunities for all children with disabilities

and students with disabilities were to be integrated, when possible, into general education classrooms. The Education for All Handicapped Children Act (EHA) (P.L. 94-142) was signed into law by President Gerald Ford in 1975 and went into effect in October of 1977. This law guaranteed free and appropriate public education for all students with disabilities and protection of parental rights. It ensured school districts that the federal government would provide financial assistance to state and local governments making an effort to implement full education for students with special needs. The 1975 EHA and its subsequent reauthorizations in 1983 and 1986 improved educational rights for students with disabilities and mandated major changes in the way they were educated. Students with disabilities moved from placements in self-contained classrooms, special schools, institutions and home to "regular" schools. For the first time, students with disabilities were mainstreamed, that is, they were assigned to special education classrooms, but spent at least part of their school days in general education settings.

In 1986, Assistant Secretary of Education Madeleine C. Will formally introduced the Regular Education Initiative (REI). It was monumental in that it began another new "era" in the evolution of education for students with disabilities and consequently, for educators. REI placed general educators in a position of becoming more responsible for the education of students who have special needs. This initiative presented a conception that regular education *should* take over even more of the functions traditionally assigned to special education. Historically, this was a big step toward increasing the shared responsibilities by general and special educators for educating students with disabilities. It was very vague, however. Since REI did not specify how much time students with disabilities should spend in general education classrooms, the debate over inclusion began. Should students spend part of their school day in the general setting and a part in a special education setting or should they spend all of their school day in a general education setting? The

LRE requirements of Part B of the EHA have remained in the law through several reauthorizations, but have been and continue to be debated and discussed because of the influences of REI.

> ...to the maximum extent appropriate, children with disabilities including children in public or private institutions or care facilities, are educated with children who are *non*disabled; and special classes, separate schooling or other removal of children with disabilities from regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (34 C.F.R. § 300.114(a)(2)).

In spite of the sometimes vague nature of legislative and judicial decisions persons with disabilities have been brought into inclusive educational environments and into the social and economic life of our society (Shaver, Curtis, Jesunathadas, & Strong, 1987). The EHA amendments in 1983 (P.L. 98-199) and in 1986 (P.L. 99-457) extended policy to include preschool children. Families were also served by this act in order to help their children in developmental years.

In view of the evolving legislation and ensuing laws regarding schooling students with disabilities, general education teachers have been challenged to teach these children, a job they had not been trained for. Thus, although the laws' intentions were good, participation in a general education setting was often meaningless and inconsistent.

Policy continued to go forward and as efforts to protect educational rights for children continued, EHA was amended again in 1990. At this time, its name was changed to the Individuals with Disabilities Education Act (IDEA) and significant changes to previous laws were put into place. Related services expanded to include social work and rehabilitation

counseling. Discretionary programs such as regional resource centers, centers and services for children with deaf-blindness, and instructional media programs were expanded. Additional discretionary services were added: transition services, a new program designed for students with severe emotional disturbances, and a research and dissemination service for children with ADHD. The law also stated that transition and assistive technology must be included in a child's IEP. Two specific disability categories, traumatic brain injury and autism, were added. IDEA set aside federal funding of special education programs for states that met criteria set by principles carried through from P.L 94-142 and subsequent reauthorizations and the new law. In 1996 the National Information Center for Children and Youth With Special Needs published a document that included the following the IDEA principles.

- All children and youth with disabilities, regardless of the severity of their disability, will receive a Free Appropriate Public Education (FAPE) at public expense.
- Education of children and youth with disabilities will be based on a complete and individual evaluation and assessment of the specific, unique needs of each child.
- An Individualized Education Program (IEP), or an Individualized Family Services Plan (IFSP), would be drawn up for every child or youth found eligible for special education or early intervention services, stating precisely what kinds of special education and related services, or the types of early intervention services, each infant, toddler, preschooler, child, or youth will receive.
- To the maximum extent appropriate, all children and youth with disabilities will be educated in the regular education environment.
- Children and youth receiving special education have the right to receive the related services necessary to benefit from special education instruction. Related services include:

transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech pathology and audiology, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, and medical services for diagnostic or evaluation purposes. The term also includes school health services, social work services in schools, and parent counseling and training (C.F.R.: Title 34; Education; Part 300.16, 1993).

- Parents have the right to participate in every decision related to the identification, evaluation, and placement of their child or youth with a disability.
- Parents must give consent for any initial evaluation, assessment, or placement; be notified of any change in placement that may occur; be included, along with teachers, in conferences and meetings held to draw up individualized programs; and must approve these plans before they go into effect for the first time.
- The right of parents to challenge and appeal any decision related to the identification, evaluation, and placement, or any issue concerning the provision of FAPE, of their child is fully protected by clearly spelled-out due process procedures.
- Parents have the right to confidentiality of information. No one may see a child's records unless the parents give their written permission. The exception to this is school personnel with legitimate educational interests (NICHY).

In 1995 the general education community began to make a case for opening up special education law and changing it from an access law to an outcomes statute (Egnor, 2003). Subsequently, when IDEA was reauthorized in 1997 major changes were enacted, among them,

- students with disabilities would be included in statewide assessments
- there would be general education teacher presence at IEP meetings

As demonstrated through litigation and resulting laws prior to 2001, legislation that sought to improve education for students with disabilities was primarily special education law. On January 8, 2002, however, President George Bush signed the No Child Left Behind Act of 2001 (NCLB 2001) into law, which targeted *all* students exemplifying the evolving erosion between two separate entities, general and special education. It stated explicit support for the belief that every student, including students with disabilities, could learn and demonstrate progress toward general state core curriculum content standards. "NCLB raises expectations for all states, local school systems, and schools in terms of ensuring that all students meet or exceed state standards in reading and mathematics within their twelve years" (Turnbull, Huerta, & Stowe, 2006, p. 1). "States must specify annual objectives to measure progress of schools and districts to ensure that all groups of students, including low income students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency, reach proficiency within twelve years" (p. 26).

The No Child Left Behind Act took great initiative in establishing a national realization that without question, students with disabilities would be given a rigorous public education. Emphasizing that point was the urgency placed on progression of students with disabilities, to the greatest extent possible, through the general education curricula and participation in state standard's assessments (Essex, 2006, Rose). Participation was intended to "focus attention on the accommodations and adjustments necessary for disabled children to access the general curriculum and the special services which may be necessary for appropriate participation in particular areas of the curriculum..." (U.S. Senate, 1997).

Following NCLB 2001, IDEA was reauthorized in 2004, continuing an effort that commenced in the 1800s (in the United States) to insure constitutionally granted education rights for *all* students (first and foremost those with disabilities). Again, the expectation to include students who have disabilities in general education classrooms expanded. IDEA 2004 was founded on the premise that students with disabilities could benefit from participation in the general curriculum and achieve measurably improved performance (Rose, 2001). IDEA 2004 stated that students with disabilities would participate in Adequate Yearly Progress (AYP) requirements of NCLB (Thompson, Lazarus, Clapper & Thurlow, 2006). It was written as a comprehensive law that integrated/considered three primary laws already in place: Section 504 of the Rehabilitation Act, the Americans with Disabilities Act, and NCLB 2001 (Turnbull, Huerta, & Stowe, 2006).

Section 504 and ADA are civil rights laws that protect individuals with disabilities from, among other things, education discrimination. IDEA protects education rights of students with disabilities. The relationship between IDEA and NCLB are procedural and specific. As explained by Turnbull, Huerta, and Stowe, 2006, IDEA has aligned itself with the major principles that NCLB rests on: (a) accountability, (b) highly qualified teachers, (c) scientifically based interventions, (d) local flexibility, (e) safe schools, and (f) parent participation and choice.

- The NCLB *principle of accountability* is that all schools should educate all students so that they can demonstrate proficiency on state or local standardized assessments. IDEA states that students with disabilities will participate in such assessments.
- The NCLB *principle of highly qualified teachers* is that teachers must be well prepared to teach, so they would be required to meet federal and state standards before being certified to teach. IDEA has similar requirements of those who teach students with disabilities.

- The NCLB *principle of scientifically based intervention* is that these highly qualified teachers must use researched based teaching interventions and materials. IDEA aligns itself to this principle in that students with learning difficulties are evaluated with scientifically based evaluation tools and then are provided with appropriate education using scientifically researched methods and materials.
- The NCLB *principal of local flexibility* is that state and local educational agencies have some flexibility and choice in how federal funding to schools is used to obtain NCLB outcomes. IDEA also grants discretion about use of IDEA funds.
- The NCLB *principal of safe schools* is that students learn and teachers teach best in safe schools. IDEA aligns itself in that they have procedures and standards for disciplining students with disabilities.
- The NCLB *principle of parent participation and choice* is that parents have the right to participate in their children's education, and can remove their children from unsafe schools and schools that are failing. IDEA protects educational rights and grants private schooling for children with disabilities in the event that the child's school is not meeting expectations of the law.

In retrospect, "the whole history of education for exceptional children can be told in terms of one steady trend that can be described as progressive inclusion" (Reynolds & Birch, 1977 p. 22). Today, more that thirty years after that statement was published, the same statement can be made. National concerns led to a number of key amendments to EHA and IDEA between 1975 and 1997 (Office of Special Education Programs, 2000) followed by NCLB 2001 and IDEA 2004, all with the goal of insuring increasingly *inclusive appropriate public education* for students with disabilities.

Efforts to Prepare Teachers

With each amendment and reauthorization of education/special education law, a profound realization of the need for school reform initiated change to the ways in which school systems educated students with disabilities. The present period of education reform *expects* all students, including students with disabilities, to meet projected education proficiency standards (NCLB 2001). The most recent amendments, NCLB 2001 and IDEA 2004, became catalysts for renewed strength in the movement to ensure that students with disabilities have unquestioned access to public education and focused attention on including them in general education settings. IDEA (2004) "enacts a presumption that students with disabilities will be granted access to and educated in the general education curriculum and will participate in other general education activities" (Turnbull, Huerta, & Stowe, 2006). Consequently, purposeful changes were adopted as a means to help students with disabilities maximize their progress toward successful achievement of general education curricular standards.

As a consequence of federal mandates and new performance expectations for public schools regarding accountability for *all* students, the academic performance of students who have disabilities has become public interest and a concern among teachers, administrators, and other education professionals. In an effort to achieve the expected, public education has had to expand its focus to the mandated accountability for the academic performance (i.e. achieve state learning outcome standards) of *all* students. Inclusive school programs are being developed and implemented and increasing numbers of students with disabilities are being included in general education classrooms (McKleskey & Waldron, 2002). "Today the inclusion of children with disabilities in the general education classroom has progressed from a theoretical argument to widespread phenomena" (Hadadian & Chiang, 2007).

Underlying the process of including students with disabilities in general education classrooms is the assumption that the general education teacher has a certain amount of knowledge about special education, its students, teaching techniques, and curriculum strategies (Hadadian & Chiang, 2007). Perhaps that thought is presumptuous and overlooks the attention that should be granted to the issue of general education teacher preparedness to teach students with disabilities. Perhaps that assumption is misplaced and attention must be granted to the issue of general education teacher preparedness to teach students with disabilities. Preservice educators must be prepared for an inclusive, diverse classroom (Hadadian & Chiang, 2007).

> Much of the responsibility of ensuring that teachers are effective must rest with the colleges and universities that prepare them. This does not come as a surprise to those who have educated the nation's teachers. The institutions that are members of the American Association of State Colleges and Universities (AASCU) produce nearly three fifths of the beginning schoolteachers in the United States. For this reason, the presidents and chancellors of these comprehensive colleges and universities have recognized the need for and their role in ensuring the quality of teacher education programs, and the fostering of reform where needed (AASCU Task Force on Teacher Education, 1999, p. 5)

If we trace the history of personnel training concurrent with the steady "progressive inclusion" of students with disabilities into the general education system, we would not discover an equitable progressiveness in teacher preparation programs. Students with disabilities have been present, by law, in general education settings since 1975, yet according to Stodden Galloway, and Stodden (2003), "most teachers have little or no preparation in addressing students' individual needs to help them learn standards based curriculum" (p. 14).

Unquestionably, preservice teacher preparation, the knowledge and skills needed to implement inclusive practices, thus the ability of general educators to address specific needs effectively is critical (Lambert et. al., 2003). "A well-prepared teacher is vitally important to a child's education" (Essex, 2006, pp. 61, 62) and regular educators are critical partners in educating today's students with disabilities. Curran, Fennerty and Majsterek, 2004, conducted survey research to find out about differences in general education teacher training across the United States. Interestingly, though Federal laws that call for accountability for progress made in general education curriculum mandate education for students with disabilities, the research found much inconsistency. NCLB allows states to establish their own teacher certification requirements, giving way to major differences in teacher training among states. They found that 12 states reported requiring a stand-alone special education course for a general education teaching certificate. Thirty-nine states indicated that they had no stand-alone special education class. Although the authors cautioned that the self-report results may be limited by accurate knowledge provided by the representatives from each state, alarming discrepancies in teacher preparation exist.

According to the most recent reports of the National Association of State Directors of Teacher Education and Certification (NASDTEC), (2004), 52% of states require some coursework in special education for the initial teaching certificate. Twenty-two percent of states have no required "special education component," and 26% did not report data. Thus, of the 37 states that reported data, 70.27% (26 states) require some special education coursework while 29.72%, or 11 out of 37 states, have no special education requirement of general education preservice teachers applying for initial certification (2004). "A few teachers will have extensive

training in special education; most will have virtually none" (3 or less credit hours of university training in special education) (Mock & Kauffman, 2002, p. 205).

Furthermore, state response to the "highly qualified teacher" mandates is compliant but very inconsistent. The "Secretary's Sixth Annual Report on Teacher Quality" published by the U.S. Department of Education, Office of Postsecondary Education (2006). *Higher Education Act* Title II Reporting System, provides data that responds to NCLB's *highly qualified teacher* and reports the following:

1. Each state develops its own plan. Each state's plan can be accessed at the United States Department of education website, http//:www2.ed.gov/teacherqual/hqtplans/index/html.
2. Requirements for special education content in general education teacher training programs differ among states. Content standards that direct preservice preparation to teach students with disabilities being educated partially or entirely in general education settings, differ greatly.
3. Licensure exam requirements differ. According to the Secretary's Sixth Annual Report on Teacher Quality reports from the academic year 2004-2005, forty-three states and the District of Columbia (collectively referred to, from this point on, for the purposes of this chapter as *states*) require licensure exams and seven do not.
4. The exams that each state requires are different. The tests available include (a) basic skills; (b) professional knowledge; academic content and pedagogy (e.g., mathematics, social studies, science, the arts); (c) other content areas (e.g., agriculture, marketing, computer science); (d) teaching special populations (e.g., special education, English as a Second Language); and (e) performance assessments. Of the forty-four states requiring

exams, only 30 required general education teachers to take a test that pertains to teaching special populations.

5. Regarding assessment for certification or licensure, "each state has the authority to determine the minimum passing score (also called the "cut score") on all assessments required for certification or licensure" (pp. 26, 27). The minimum passing score is generally set at or below the median national score.
6. *Some* states require elementary education candidates to have a students teaching experience where they assume the "duties of a full-time classroom teacher under the direct supervision of an experienced mentor teacher" (p. 40) ranging from 5 – 20 weeks.

Clearly, there is an inconsistency in teacher preparation and nonetheless, each legal change to ways of and requirements for educating students with disabilities over time, has brought these students nearer to the general education classroom and curriculum. For example, recall NCLB's *principle of accountability.* It requires that *all* schools educate *all* students (including, among other subgroups, students with disabilities) so that these students can demonstrate proficiency on state or local standardized assessments. Call to mind that the Individuals with Disabilities Education Act in 2004 strongly considered the principles of NCLB and made changes that intended to help students with disabilities make progress toward attaining the general education learning outcomes that are aligned with state curricular standards and to assure high expectations of these students. An example of IDEA's alignment with NCLB regarding the *principle of accountability* is as IDEA 2004 states, with exception to a very few, students with disabilities *will* participate in state learning outcome assessments. Justifiably, the changes raised valid concern about how well regular educators are prepared to work with these students (Kleinhammer-Tramill, 2003); to prepare *all* students, including students with

disabilities, to perform adequately on state assessments.

> In view of all of the advantages of inclusion and in the context of standards, and the No Child Left Behind Law that recognizes that millions of children do not have the benefits of well-prepared teachers in their classroom, there is an urgency to address inclusion issues as they relate to teacher preparedness (Singh, 2006).

When looking through the history of governmental initiative for teacher training pertaining to educating students with disabilities (1960s to the present time), much of it has been directed toward special education personnel. "Federal support for personnel preparation in special education has succeeded in increasing the supply and quality of education personnel and in building national capacity for preparation of new generations of special educators" (Kleinhammer-Tramill & Fiore, 2003). Since 1967, the federal government has responded, but only *intermittently,* to concerns about preparing general educators to teach students with disabilities. Invitational grants, grants that *encouraged* (but not *required* applicants to address given issues), were set aside to prepare "regular educators and related personnel to work more effectively with children with disabilities" (Harvey, 1980 in Kleinhammer-Tramill, 2003). When invitational grants became the means for providing teacher training it was problematic for a number of reasons, among them the inconsistency in training between grant awardees and non awardees, thus an inconsistency in special education services for students with disabilities (Curran, Fennerty, & Majsterek, 2004).

The federal initiatives for personnel preparation pertaining to students with disabilities were described in *An Analysis of Federal Initiatives To Prepare Regular Educators To Serve Students with Disabilities: Deans' Grants, REGI, and Beyond* (Kleinhammer-Tramill, 2003) and are listed below:

- 1967: P.L. 90-35: *Education Professional Development Act* (EDPA) set aside appropriations for in-service training of regular educators to work with students with disabilities and to prepare related service providers;
- 1974-1977: The Federal Division of Personnel Development provided another funding source for regular educators to learn about students with disabilities: *Special Education Training for Regular Education Teachers* authorized monies to train personnel to educate students with disabilities with specific provision of regular education teachers to serve students in the Least Restrictive Environment;
- 1975-1982: Additionally, Regular Education In-service Grants (REGI) funded teacher in-service;
- 1975-1982: Dean's Grants (REGP) provided funds for improving preservice education of regular educators. Efforts funded as a result were
    - faculty development;
    - revisions in teacher training curriculum and instruction;
    - development of field experiences and partnerships with K -12 schools ensuring that student teachers have experiences with students with disabilities;
    - administrative restructuring to accomplish more shared responsibilities for teacher preparation, especially between general and special education and
    - development of products such as training modules, courses, and materials (Reynolds, 1978).
- 1986: the *Regular Education Initiative* supported absolute priorities (i.e., applicants must respond to the "absolute priorities" to receive funding) for preparation of regular educators and grant monies were made available to State Education agencies.

- 1987: Federal support awarded funding for preservice training for general and special education to work within a cooperative framework between state education agencies and institutions of higher education (IHE's).
- 1994: Under IDEA funds were granted to programs that would promote personnel quality, among them, *Preservice Training Programs to Prepare Regular Educators.*
- 1997: Federal support was given to personnel preparation as a means to improve outcomes for students with disabilities and to assist their access to general curriculum. "The application solicited projects that provided 'approaches to better enable faculty at schools and colleges of education to prepare teachers to serve students with disabilities in regular classrooms'" (USDE, 1977 in Kleinhammer-Tramill 2003). Funding also supported State Improvement Grants for professional development.
- Presently, the *No Child Left Behind Act 2001* and Title II of the *Higher Education Act* continue to support improved teacher preparation.

Neither the Kleinhammer-Tramill and Fiore nor the Kleinhammer-Tramill reports published in 2003 revealed any information about accountability, the skill and knowledge of focus, nor any subsequent progress of students with disabilities in general education classrooms resulting from this government funding. There is insufficient research to indicate that these governmental efforts have resulted in adequately prepared general education teachers (Stayton & McCollum, 2002) or consequential better and more successful regular education experiences for students with disabilities.

In addition to government funding that encouraged general education teacher training regarding students with disabilities included in general education settings, some universities and state teacher certification boards recognized the need for teacher preparation in this area and

established training requirements. Most research investigating the extent of these requirements across the United States focus on numbers of states and university programs that did not implement such training. A study conducted in 1985 by Ganschow, Weber, and Davis, revealed, that at that time 33 states had no special education requirements or required only one special education related course for general education teacher licensure. Five years later, Fender and Fieldler reported that 40 states required a special education course for teacher certification. The NASDTEC knowledge base indicates that 11 of the 37 reporting states had "no special education component" (2004).

Presently, in light of state standards outcomes based education some of the requirements have changed. Some states have dropped their requirements for a special education related course and have embedded special education requirements in state outcome standards required for teacher licensure. This study investigated licensure requirements in each state. Results are reported in Chapter 4.

The Study of Personnel Needs in Special Education (SPeNSE) report from 2001 indicated that 96% of general education teachers had taught or were teaching students with disabilities. Only a third of teachers who had taught for 6 or less years reported having training that pertained to collaborating with special educators, the training area that showed the greatest impact on teachers' sense of efficacy when working with students with disabilities. Just over half of these teachers had been specifically trained in making adjustments to instruction and two-thirds had been taught strategies to manage student behavior. The lack of training heightens fear, which negatively impacts attitudes (Lombardi & Hunka, 2001) and teachers' attitudes about including students with disabilities in general settings are crucial (Avaramidis & Norwich, 2002; Burke & Sutherland, 2004; Deschler, 2008). For these reasons, it is important to gain an

understanding of attitudes toward students with disabilities being included in general education classrooms then refine existing teacher preparation programs accordingly (SPeNSE. 2001). It is important that teachers see themselves a players, not as pawns, believe they are players in a child's life, and see the "unteachable" as teachable (Deschler, 2008).

General Educators' Perceptions of Teacher Training

Numerous studies that surveyed preservice teachers found that to successfully include students with disabilities in their general education classrooms depends, to a great extent, on teacher confidence and/or attitude toward inclusion (Chester & Beaudin, 1996; Henning & Crane, 2002; Jung, 2007; Lambert, Curran, Prigge & Shore, 2005; Silverman, 2007). Confidence and attitude have been linked to teacher preparation in a number of studies. Studies that examine teachers' feelings about their preparedness to teach students with disabilities frequently report inadequate training and, consequently, anxiety about teaching these students. A study conducted by Mitchell D. Chester and Barbara Q. Beaudin in 1996 considered the self-efficacy beliefs of new teachers and characteristics that effect attrition rates in the early years of teaching. Analysis found, among other factors, that *training* was observed as a key factor in beginning general education teacher success with students who have disabilities.

In 1996, Scruggs and Mastropieri conducted a meta-analysis of data collected from 28 surveys between 1958 and 1995 revealing that even though two-thirds of the approximate 10,000 teachers surveyed agreed with integrating children with and without disabilities, a significant number felt inadequately prepared or were unwilling to work with students who had more significant disabilities. Findings from this study are consistent with a 2005 study by Lambert, Curran, Prigge and Shorr.

Lambert, Curan, Prigge, and Shorr focused on dispositions in a study titled, *Addressing Inclusion in an Era of Education Reform: Dispositions of Secondary and Elementary Pre-service Educators in the Pipeline* (2005). During six academic quarters a total of 479 preservice teachers who were enrolled in a required introductory inclusion course, participated in the study. Participants completed Berryman's *Attitudes Toward Mainstreaming Scale* (1989), both pre and post instruction. Two hundred and seventy-two of the 479 participants were elementary preservice educators. Throughout the study, approximately 25% of the total study sample did not complete either the pre survey or the post survey, so were not included in the results.

The survey included eight items that measured attitudes toward general inclusion practices. On a 4 point scale, 6 of the 8 items had mean scores of >3.00 at pre-survey. Two items of particular interest to this study, the *feasibility* of teaching a wide range of students in one classroom had a mean of 2.86 and the s*kill* of the general educator to teach a variety of students had a mean of 2.96. Overall, the scores at post-test ranged from 3.31 to 3.92. The post-instruction survey showed an average effect size of .50. The item, f*easibility* of teaching a wide range of students in the same class, changed significantly with a mean change of .54. The mean change from pre to post-survey on the *skill* of the general educator to teach a variety of students in one classroom was .35, producing the mean score of 3.31. When looking at attitudes toward inclusion of individuals with specific disabilities, participants were least in favor of including students with mental retardation, behavior disorders, and persistent discipline problems. Average mean scores at pre/post were 2.40/3.00, 2.65/2.98, and 2.80/3.10, respectively. Preservice teachers were least in favor of working with students with more severe disabilities.

The results of the Lambert, Curan, Prigge, and Shorr survey confirm the results of similar studies in that preservice preparation of general educators for teaching students with disabilities can change their willingness and their abilities to work with these students; "even a single course can change dispositions and instructional competencies of *preservice* educators towards inclusion tenets of instructional competencies" (2005). For preservice teachers, the study results show positive results after completing one course pertaining to students with disabilities. The authors did not comment, however, on the longevity of the reported changes and whether these changes remained when the preservice teachers were employed teachers.

To inform change in teacher training programs, studies to determine the knowledge and skills being taught in these courses need to be expanded. Also needed are studies similar to the Lambert et.al study that will compare attitudes and skills of inservice general education teachers who have had specific training to work with students with disabilities with those who have not.

A 2002 study by Henning and Crane examined graduate school experiences of two students, one studying early childhood special education and the other, social studies education. These students were in the process of developing and implementing a social studies teaching model that would help to prepare preservice teachers for teaching students with special learning needs. Their research participants were 29 elementary education teacher candidates taking a block methods course before their student teaching semester. Concurrent with the block course, the candidates were also enrolled in a field experience course for which they spent two days each week for 10 weeks in a classroom. Candidates were asked to reflect on their "experiences with special education and their beliefs about teaching children with disabilities." Participants consistently shared their fears and lack of confidence relating to teaching students with

disabilities in their classrooms indicating that they felt unprepared. When the participants, who for several weeks, had been in a field placement that included students with special needs and had completed training in lesson planning took the initial survey, only about 10.3% of them agreed that they knew how to adapt social studies lessons for children with special needs. In response to the survey results, Henning and Crane (2002) developed an inclusion model to help the teachers adapt their social studies lessons. To help broaden the teacher candidates' knowledge of specific disabilities, they were also shown simulations of different disabilities. Following explicit instruction in adapting social studies lessons 93.1% of the teacher candidates who participated agreed that they knew how to develop social studies plans for students with disabilities.

The Jung study published in 2007 also explored whether attitudes toward inclusion could be positively affected through special education courses and whether preservice teachers' abilities and confidence levels when working with students with disabilities needed to improve. Sixty-eight first year preservice teachers who were enrolled in a class called "Teaching in a Diverse Society" (in which a two-week block was devoted to special education) as well as 57 student teachers majoring in "Early Childhood" and "Intervention Specialist" participated. Unlike other studies, Jung included student teachers who could give experience-based responses to the survey questions rather than strictly knowledge-based ones. Data illustrated more favorable attitudes for inclusion *prior* to student teaching than after or during student teaching. Attitudes toward inclusion among student teachers were affected by the student teachers' *lack of confidence in their own instructional skills* as well as in the support they were getting from cooperating teachers. A statement by May and Kunder, cited in the Jung study/report reinforces these findings and the findings of other researchers: "a lack of training can be an obstacle for

teachers in dealing with any level of exception in students" (1996).

In a study published in 2007, Jenzi C. Silverman compared attitudes toward inclusion and epistemological beliefs of preservice teachers. She used the ORI, *Opinions Relative to Integration of Students with Disabilities* (Antonak & Larrivee, 1995) and the EPI, *Epistemic Beliefs Inventory* (Schraw, Bendixen, & Dunkle, 2002). Silverman found that those with "high level epistemological beliefs were significantly more likely to hold positive beliefs toward inclusion" and the statistically significant negative correlations between ORI and EBI scores confirm, as Silverman notes, that participants who have a more positive attitude about inclusion also tend to have higher epistemological beliefs. Specific ORI items showed negative attitudes toward potential teacher training and classroom management problems associated with inclusion. Thus, there are implications for teacher training programs. Teaching and learning opportunities for preservice teachers that promote developing beliefs related to theories of knowledge may foster positive attitudes toward inclusion.

In April of 2001, Singh presented a study entitled, *Are General Educators Prepared to Teach Students with Physical Disabilities,* at the Annual CEC conference. This study investigated the knowledge base and readiness of 50 elementary and secondary general education teachers. Study findings point to a *need for changes to current regular education preparation*. Sixty six percent of them had some knowledge about environmental needs such as wider walkways and special classroom furniture. Over 90%, however, did not understand disability-specific characteristics and special health needs associated with physical disabilities. Furthermore, only 40% of the teachers participating in the study felt adequately prepared to work with students with physical disabilities who are included in general education classrooms. This study does not represent the entire population accurately since participants came only from a

small section of Western New York but results were similar to findings conducted by other researchers.

Dr. Singh also examined the effectiveness of a required special education course for all regular education teacher candidates at Eastern Connecticut University (ECU) in 2006. The course introduced preservice teachers to legal issues regarding educating students with disabilities, characteristics of various disabilities, families of children with disabilities, life-span needs of children with disabilities, positive behavior supports, accommodations and modifications, universal design for learning, and differentiated instruction. Concurrent to that course, the students had a 45-hour clinical experience in which they observed and tutored children with disabilities. Twenty-two teacher candidates enrolled in the class responded to a survey during the class's second session. At the end of the semester the 22 students took a post-test (identical to the pre-test). During the pre-test, only "a small minority of the teacher candidates" indicated that they felt prepared to teach students with *mild* disabilities (i.e. "learning disabilities, emotional/behavioral challenges, and mild mental retardation"). At post-test, 80% of the preservice teachers reported that they were prepared to teach students with *mild* disabilities. Thirteen percent of the participants indicated that they felt prepared to teach students with physical disabilities at pre-test, 73% reported preparedness at post-test. Only 5% of the respondents indicated knowledge about IEP's and classroom accommodations at pretest and 95% at post-test. Although Singh reminds readers to generalize with caution, this particular study indicates that a course in special education combined with field experience has positive effects regarding preparing regular education teacher candidates to include/teach students with disabilities.

Several countries are facing challenges similar to those of the United States as they

focus on educating students with disabilities in general education settings. The researcher found great numbers of studies that investigated the training and the resulting confidence and abilities of general educators to teach students with disabilities. Scholars from these countries are finding results that mirror those of U.S. researchers (and vice-versa). Following are four statements from recent studies:

1. Loreman, Earle, Sharma and Forlin (Canada, Canada, Australia and Hong Kong, respectively) state, "One area which has been identified as being vital to the continued development and success of inclusive educational practices is pre-service teacher education" (2005).
2. "Beginning teachers need not only the skills and knowledge base to be successful in inclusive environments, but also need to develop positive attitudes and sentiments towards their work in this area in order to ensure an inclusive future in their classrooms" (Avramidis, Bayliss, & Burden, 2000; Avramidis & Norwick, 2002 in Loreman, et.al., 2005) The scholars previously cited are from Canada, U.K., and U.K., and lastly, Canada and the U.K., respectively. Loreman is a Canadian researcher.
3. Stanovich and Jordan (University of Toronto) make the point that teachers must have the confidence and the competence to adapt, modify and teach students with disabilities since these students are being educated in general classrooms at a greater rate than ever before. "Unfortunately, many teachers who are currently teaching in such classrooms have not been prepared to meet the challenges they face on a daily basis" (2002).
4. Alison Bishop and Phyllis Jones from Northumbria University, U.K. support the notion that preservice teachers must have necessary training in order to equip them "to meet the challenges and rewards of working with children with severe and profound learning

difficulties in their future teaching careers" (2003).

As demonstrated in this literature review, there are important concerns in the United States and in other countries about the mandates of laws regarding educating students with disabilities and the knowledge and skills, and attitudes and confidence possessed by the teachers who teach them. In the United States and in several other countries, children with disabilities are expected to be educated in general education classrooms alongside non-disabled peers. The reality, however, seems to be that significant numbers of general education teachers are seriously challenged by the expectation, consistently reporting inadequate training. Furthermore, there are records of inconsistent preservice training among states, with 29.72% of the 37 reporting states requiring "no special education component" for initial teacher licensure (NASDTEC, 2004). "Teachers may feel challenged, hopeful, and desirous of what can be accomplished, but they may also feel frustration, burden, fear, lack of support, and inadequacies about their ability to teach different children with different kinds of problems" (Shade & Stewart, 2001). They must have the knowledge and skills needed to meet demands of their jobs and to make fulfillment of expectations possible and the educational outlook for students with disabilities promising.

Preferred Skills and Knowledge Recommended for Beginning Teachers

In response to the needed attention to teacher preparation, two very visible, large organizations, the Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee for Learning Disabilities (NJCLD) created lists of recommended standards or preferred skills for general education teachers who will share responsibility for educating students with disabilities.

INTASC was created in 1987. It is made up of state education agencies and national education organizations and is dedicated to "the reform of the preparation, licensing, and on-

going professional development of teachers" (Council of Chief State School Officers, 2007). Current members are primarily state education agencies that are responsible for teacher licensing, program approval, and professional development (Council of Chief State School Officers, 2007). INTASC developed model standards (2001) for teacher licensure with support and advice from the following professional organizations:

- American Association of Colleges for Teacher Education (AACTE)
- American Association of School Administrators (AASA)
- American Federation of Teachers (AFT)
- Association of Teacher Educators (ATE)
- Council for Exceptional Children (CEC)
- National Association of Elementary School Principals (NAESP)
- National Association of Secondary School Principals (NASSP)
- National Association of State Boards of Education (NASBE)
- National Association of State Directors of Special Education (NASDSE)
- National Board for Professional Teaching Standards (NBPTS)
- National Council for the Accreditation of Teacher Educators (NCATE)
- National Education Association (NEA)
- National School Boards Association (NSBA)

The efforts of this consortium served as a means to create "a coherent approach to educating and licensing teachers based upon shared views among the states and within the profession of what constitutes professional teaching" (Council of Chief State School Officers). The recommended preferred standards, based on the work of the INTASC, for what beginning general education teachers and special education teachers need to know and be able to do to

teach students with disabilities were published in a document titled, *Model Standards for Licensing General and Special Education Teachers of Students with Disabilities: A Resource for State Dialogue* (2001). Underlying the development of such standards was the belief that,

> all students with disabilities can experience positive educational outcomes when teaching and learning are appropriate and pedagogically sound … all teachers, both general educators and special educators, must have knowledge and skills related to their subject matter discipline and the principles of effective teaching and learning as well as specific knowledge and skills drawn from the field of special education (Council of Chief State School Officers, 2001).

To determine the preferred skills and knowledge that both beginning general education teachers (elementary) and special educators need and what the consortium would recommend, INTASC worked with a "Special Education Committee." Ten core principles that had been developed in 1992 to benefit general education students without disabilities served as a basis, but each of them was expanded as follows, to include implications for students with disabilities: (a) key skills, knowledge, and dispositions for general and special educators who teach students with disabilities; and (b) additional knowledge, skills and dispositions recommended for beginning special education teachers. For the purpose of this literature review, the researcher focused on the former, summarizing the skills and knowledge recommended for ALL teachers. The 10 core principles (italicized below) are quoted from *Model Standards for Licensing General and Special Education Teachers of Students with Disabilities: A Resource for State Dialogue* (Council of Chief State School Officers, 2001). A brief list of associated teacher skills and knowledge follows each standard.

Principle # 1: *"The teacher understands the central concepts, tools of inquiry, structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students***."**

The teacher…

- has a solid understanding of content for subject areas, how the content is organized, and how it relates to other content areas.
- can structure lessons according to scope and sequence as well as to the developmental level of the students.
- understands that children with special needs need modifications, accommodations or other adaptations to the general curriculum.
- recognizes that some students need an expanded curriculum depending on their communicative, social and developmental levels, motor skills, functional level, self advocacy, independence, etc.
- has a basic understanding of federal legislation related to individuals with disabilities (i.e. IDEA, Section 504, and ADA) and understands key concepts including IEPs and transition plans, "special education and related services, disability definitions, free appropriate public education, least restrictive environment, continuum of services, due process, parent participation and rights."

Principle #2: *"The teacher understands how children learn and develop, and can provide learning opportunities that support the intellectual, social and personal development of each learner."*

The teacher…

- has a sound understanding of cognitive, social, physical and emotional development from

birth to adult.

- knows characteristics of high incident disabilities and understands the impact on learning and development. He/she continuously evaluates his/her own assumptions about disabilities and has realistically high expectations for students with disabilities.
- knows how to create challenging learning opportunities for students with disabilities while offering support.
- knows that the level of knowledge and functioning the individual has, and the nature and severity of the disability, effects how the student's disability impacts the way in which he/she learns.

Principle #3: *"The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners."*

The teacher…

- instills sensitivity and understanding of individuals with disabilities.
- provides appropriate information to students about disabilities.
- works to establish respect between all students as individuals.
- establishes respectful relationships between individuals without disabilities and individuals with disabilities.
- understands a disability does not predict how a child learns.
- understands that different cultures and families perceive disabilities differently.
- is aware of cultural, ethnic, gender, and linguistic differences that can lead to inappropriate assessment or can be misinterpreted as a disability.

Principle #4: *"The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills."*

The teacher…

- shares responsibility for educating all students with disabilities.
- works collaboratively to provide effective instruction for students with disabilities.
- uses research based instructional practices.
- understands that he/she has to provide multiple ways for children with disabilities to learn and to demonstrate what they know.
- uses self control, advocates for students with disabilities and teaches these students self advocacy and self control.
- uses assistive and instructional technology to promote learning and independence among students with disabilities.

Principle #5: *"The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation."*

The teacher…

- identifies strengths, interests and preferences of students with disabilities to promote involvement and contributions to classroom and community activities.
- helps students with disabilities learn positive coping strategies to cope with frustrations associated with their disability.
- promotes positive social development and interactions with age appropriate peers.
- creates learning environments that encourage self motivation and confidence among

students with disabilities.

- participates in designing behavior management plans and responds proactively to the needs of students with disabilities.

Principle #6: *"The teacher uses knowledge of effective verbal, nonverbal, and media communication technologies to foster active inquiry, collaboration, and supportive interaction in the classroom."*

The teacher…

- knows general communication strategies and uses assistive technologies regularly.
- understands that communication difficulties can impact a student's ability to participate, to access information, and to make progress in the general curriculum.
- knows that communication difficulties can impact how a student with disabilities is able to interact with peers and adults.
- collaborates with speech and language specialists to determine skills and to work on language and communication skills that students with disabilities struggle with.
- provides opportunities for communication practice.
- understands that linguistic background impacts language development and communication and uses this information to plan instruction for linguistically diverse students with disabilities.
- is aware of the verbal and non-verbal messages he/she conveys to students with disabilities during instruction.
- understands the positive and negative effects that verbal and non-verbal communication have on self concept and motivation.

Principle #7: *"The teacher plans instruction based on knowledge of subject matter, students, the community and curriculum goals."*

The teacher…

- monitors and collaborates with Special Education teachers to revise educational plans for students with disabilities.
- works with appropriate professionals to create positive learning experiences and to maximize participation and progress of students with disabilities.
- collaborates to expand general education curriculum to include students who require such a curriculum in the general education classroom.
- designs the classroom environment to accommodate disabilities.
- modifies learning experiences by considering information provided by parents, community members, etc.

Principle #8: *"The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner."*

The teacher…

- understands the differences and the contribution of formal and informal assessments to special education eligibility (under IDEA).
- knows the continuum of educational placements and services for students with disabilities.
- uses a variety of assessments to document academic and behavioral needs within a number of different environments.
- collaborates with all teachers involved in educating students with disabilities.
- uses assessments for ongoing monitoring of student learning.

- works to help students with disabilities assess their own learning and behavior.
- understands that all students with disabilities are expected to participate in school, district, and state assessments and that accommodations or alternate assessments may be needed for some students.

Principle #9: *"The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally."*

The teacher…

- reflects on teaching, and students' progress.
- considers how accommodations or alternate methods and strategies might influence progress.
- continually challenges beliefs about students with disabilities and how they learn, acknowledging that they are capable of learning.
- expects students with disabilities to participate and to learn.
- seeks current information and best practices on how to educate students with disabilities.
- Thinks about and considers how cultural differences may affect the student's disability.

Principle #10: "*The teacher fosters relationships with school colleagues, families, and agencies in the larger community to support students' learning and well being."*

The teacher…..

- shares responsibility to teach students with disabilities and works to collaborate respectively with other teachers.
- understands the role of para educators and collaborates with them to promote effective,

safe, and socially responsible education for students with disabilities.

- accepts families as full planning partners for instruction and services.

Like INTASC, the NJCLD is a national organization advocating for the development of teacher training programs that require adequate skill and knowledge competencies for *all* teachers who teach *all* students, including students with disabilities. The NJCLD was founded in 1975 and is currently supported by more than 350,000 individuals who make up the 13 member organizations that are listed below:

- American Speech-Language-Hearing Association (ASHA)
- Association on Higher Education and Disability (AHEAD)
- Association of Educational Therapists (AET)
- Council for Learning Disabilities (CLD)
- Division for Communicative Disabilities and Deafness (DCDD), Council for Exceptional Children
- Division for Learning Disabilities (DLD), Council for Exceptional Children
- International Dyslexia Association (IDA)
- International Reading Association (IRA)
- Learning Disabilities Association of America (LDA)
- National Association for the Education of African American Children with Learning Disabilities
- National Association of School Psychologists (NASP)
- National Center for Learning Disabilities (NCLD)
- Recording for the Blind & Dyslexic (RFB&D)

The NJCLD comes primarily from a learning disabilities/special education

perspective, but like INTASC, recommends knowledge and skills for general education teachers who will be responsible for teaching *all* students in their classrooms, including students with disabilities. The NJCLD believes that *all* children should be educated by teachers who are prepared to meet the needs of *all* students in their classrooms (1997). In a 1997 report titled, *Learning Disabilities: Preservice Preparation of General and Special Education Teachers,* a list of core competencies, skills and knowledge that NJCLD believes are necessary for general and special education teachers is included. For the purpose of this study, the researcher focused on general education and the competencies that are perceived as necessary for general education teachers who share the responsibility of educating students with disabilities. "Although these competencies represent the ideal, we believe they are worthy goals toward which every teacher preparation program should strive as they undergo program review" (NJCLD, 1997, p. 1). The core competencies as listed by NJCLD follow, along with a brief list of associated teacher skills and knowledge pertaining to each competency:

Characteristics and Definitions

The teacher…

- knows current definitions and characteristics of various disabilities.
- knows how these disabilities impact the child's development and school performance.

Rights and Procedures

The teacher…

- has knowledge of the legal rights of the students and parents.
- knows the school's and the teachers' responsibilities regarding special education and related services.
- knows the procedures involved in accessing and providing special education and related

services.

Student Evaluation

The teacher…

- is familiar with common assessment tools used to assess students with disabilities.
- can identify a student's strengths and weaknesses across developmental areas.
- knows how to use a variety of formal and informal assessment tools including observation, interviews, students work samples, self assessments, and teacher-made tests.
- knows how to use continuous progress monitoring to inform lesson or curricular accommodations and modifications or referrals when appropriate.
- knows how to modify or adapt assessments to support the needs of students with learning disabilities.
- knows how to grade students with disabilities in appropriate ways.

Instruction

The teacher…

- knows how to plan and implement lesson plans that comply with the Individual Education Plan (IEP) and meet the student's (with disabilities) needs.
- understands the continuum of services and placements for students with learning disabilities.
- works collaboratively with special educators when planning and implementing instruction.
- knows how to modify instruction.
- knows how to modify the environment to accommodate the needs of students with learning disabilities.
- can adapt technology when needed.

- knows how to integrate students into the academic and social community of the general education classroom.

Social and Emotional Development

The teacher…

- models and teaches social respect and acceptance of students with learning disabilities.
- provides opportunities for appropriate, meaningful social interaction among *all* members of the classroom.
- recognizes and reinforces accomplishments (even the small ones) of *all* students.

Classroom Management

The teacher…

- knows and demonstrates various classroom management techniques to encourage social interaction and self-management.
- facilitates interaction among all students in small and large group activities.

Relationships with Families and Colleagues

The teacher…

- promotes positive interactions with children who have disabilities and their families.
- understands the child's culture.
- develops partnerships with families with regard to the child's education.
- establishes and maintains collegial relationships with the school and community.

There are many shared preferred skill competencies and teacher knowledge recommended by the INTASC "principles" (2001) and by the NJCLD "core competencies" (1998) for general education teachers who work in settings where students with disabilities are included in general education curriculum and classrooms. The following is a list, compiled by the researcher for this

study, of the preferred skills and competencies they share. The list includes 12 competency areas and their definitions.

1. *Characteristics:* The Individuals with Disabilities Education Act (IDEA) defines thirteen disability categories; the teacher candidates have broad knowledge of the disabilities and how various manifestations of these disabilities can affect development and school performance. Teacher candidates recognize individual variations in learning that exceed the typical range and have a basic understanding of the impact of the disability on school functioning.
2. *Policy and Legislation:* Teacher candidates are taught about policy and legislation that established legal procedures and requirements as well as the framework for educating students with disabilities. Teacher candidates have knowledge of legal rights of students with disabilities and their parents or guardians. Teacher candidates are taught legal responsibilities and procedures of teachers and schools regarding special education and services.
3. *IEP Process:* Teacher candidates have learned about child study teams, multidisciplinary teams that focus on identification and placement, and IEP and Individual Family Service Plans (IFSP) teams. Candidates are taught the sequence and requirements of the process of identifying students with disabilities. Teacher candidates are taught how to read an IEP or IFSP, the meanings of them as legal documents, and are taught about their roles in the IEP process from child study, special education referral, to IEP implementation and progress documentation.
4. *IEP Assessment:* Teacher candidates are taught about their role in identifying students with special needs and are exposed to assessment tools to commonly used by general

educators in that process. For example, teacher candidates are taught how to identify and document students' strengths and weaknesses through measures such as interviews, observations, and collecting student work. Candidates know how to participate in functional behavior assessments. Teacher candidates are taught to use ongoing evaluation and results to inform teaching adjustments and student accommodations including testing accommodations to meet needs of students with disabilities.

5. *Instruction:* General education preservice teachers are taught a variety of teaching techniques and methods designed to enable him/her to develop and implement lesson plans that meet the unique needs of students with disabilities. The teacher candidate has been taught to adhere to the IEP to plan and to implement instruction by collaborating with special education teachers. Teacher candidates know how to make program adjustments (accommodations or modifications) to meet the needs of students with disabilities and are taught how to integrate students with disabilities into the academic and social community of the classroom.
6. *Instructional and Assistive Technology:* Teacher candidates are taught to use technology to promote learning and communication in general education classrooms. The teacher candidate has been taught how to use assistive technology (AT) as a means to provide equitable access to students with disabilities. Teacher candidates are taught about the most common AT devices and are taught how students with disabilities can use them to participate and to access curriculum. Teacher candidates are taught how to adapt technology to meet the needs of students with disabilities (e.g. using accessibility functions built in to the computer or using text reading programs to read computer text to a student who cannot read).

7. *Social Development:* Teacher candidates are taught the importance of modeling respect and acceptance of students with disabilities. Teacher candidates are taught ways to facilitate participation of all students with disabilities in large and small group interaction within general education settings. They are taught how to provide opportunities for meaningful, ongoing social interaction between students with and without disabilities. Candidates are taught the importance of recognizing and reinforcing student successes whether large or small.
8. *Teaching Strategies:* Teachers are taught a repertoire of instructional strategies, including content specific strategies, assessment techniques, and accommodations to meet the needs of all students including students who have disabilities, and can apply them when needed. Teachers are taught about universally designed instruction as a means to reach all students, including students with disabilities in their classrooms. Teachers are taught how to use self-reflection and consequently to recognize needed changes in their plans, methods, etc.
9. *Behavior Management:* Teacher candidates are taught various classroom management techniques that assist students with disabilities with self-regulation. Teacher candidates are taught methods, strategies and techniques that will enable them to provide a safe, positive classroom learning environment for all students including students with behavior disorders. Teacher candidates are taught the implications of positive and negative verbal and non-verbal messages they may convey to students with disabilities during instruction and the potential positive and negative effects it may have on self concept and motivation.
10. *Collaboration:* Candidates are taught how to contribute their expertise to a team of

professionals who develop, monitor and revise education plans. Teacher candidates are taught ways to establish and maintain effective collegial relationships with families, school, and community in educating children with disabilities. Candidates are taught how to work with relevant colleagues to plan ongoing learning experiences that maximize disabled students' participation and learning in general education settings. Candidates are taught how to promote positive, collaborative attitudes toward individuals with disabilities and their families.

11. *Accommodations:* Teacher candidates are taught that some students with disabilities may need accommodations or expanded curriculum with modifications and learning goals that differ from general curricular goals. Teacher candidates are taught about the continuum of special education placements and services and how to recognize when a more or less restricting placement might need to be considered. Candidates are taught how to adapt instruction according to unique student needs. The teacher candidate has been taught to be aware of and to monitor external factors (i.e. noise, traffic patterns, seating, pace of instruction, size of groupings.
12. *Support Services:* Teacher candidates are taught about support services outlined by IDEA for students with disabilities. Candidates are taught that support services are an integral part of the education program for a student with disabilities. Candidates are taught the purposes of support services and support service roles in team decision-making. Teacher candidates are taught about the functions of community agencies and programs and their role of working with other professionals to ensure parents have access to these services that will help the educational progress of a student with disabilities.

These recommended standards or preferred skills for general education teachers who

will share responsibility for the education of students with disabilities have been recognized by some of the largest teaching-associated organizations in the country. Between INTASC and NJCLD, there are 26 different national organizations whose representatives collaborate, advocate and advise the broad field of education. Acknowledged by both organizations, the realities of an increasing presence of students with disabilities in general education classrooms has generated a strong realization that teacher education must be comprehensive and interdisciplinary to insure that the preparation of new teachers is adequate to meet the changing demographics of the classroom (NJCLD, 1998). "It is our hope… that members of the public and the profession alike will critically examine what a beginning teacher must know… will creatively explore how teacher preparation programs can be restructured… to ensure adequate preparation of professionals in education " (INTASC, 2001).

Summary

Over time the education of students with disabilities progressed slowly from a total ban to an accepted part of public education. Public law, 92-146 (1975) was a landmark step that acknowledged and protected the educational rights of all students with disabilities and granted them free and appropriate public education. The Regular Education Initiative (1986), another monumental step toward protecting educational rights of students with disabilities, expected general education teachers to assume more of the responsibility for their education. Presently, the NCLB policies and procedures include students with disabilities and expect *every student* who attends public schools in America to reach proficiency in reading and math by the year 2014. Mandated by both the NCLB (2002) and the IDEA (2004), with exception of a very few, students with disabilities are required to take state standards-outcomes assessments and are expected to progress through the general education curriculum. These mandates have resulted in

general education classrooms as the default setting for educating students with disabilities.

Although education for students with disabilities has been steadily more inclusive over time, teachers continue to report inadequate training and lack of confidence to teach these students. This review of the literature focused on the history of educating students with disabilities, the consequent impact on teachers, and the perceptions of inadequate teacher training by general education teachers who through federal mandates *must* share the responsibility of teaching them.

Is preservice teacher preparation keeping up with changing responsibilities and teaching expectations?

> The stagnant image of teacher preparation may have been accurate a decade ago, but teacher education has experienced more significant changes during the past decade than in the prior five. National and state attention to the quality of teachers, along with high attrition rates and external accountability systems, have added to the pressures for major changes in teacher preparation (Natalicio & Pacheco, 2000, p. 1)

What are colleges and universities throughout the United States doing to prepare elementary general education teachers for the diversities of today's classrooms? There is no research that provides clear, comprehensive answers that pertain to the overall representation of the United States' requirements for preparing elementary general education teachers.

Government support for teacher training to prepare general education teachers to work with students with disabilities has been intermittent and inconsistent. Data tell us that some states have teacher licensing requirements through separate coursework or through outcome standards learning imbedded into existing courses for general education teachers. Not all states report however, which presents a gap in the data. Furthermore, existing data show that not all states

have special education related requirements for teacher certification and for those that do, the required knowledge, skills and competencies are not specified in comprehensive reports (NASDTEC, 2004). Literature does not provide data that tell what universities are teaching beyond the state licensing requirements (when reported), to prepare general education teacher candidates to work with students with disabilities. This presents a gap in the literature if research is to inform practice. Available data do not tell us what skill competencies nor the kinds of knowledge general education teachers are expected to learn, nor do they tell us what is considered "learning."

Among others, two of the largest organizations associated with general and special education, INTASC and NJCLD, advocate for the restructuring of teacher education to insure that teachers are adequately prepared for these inclusionary practices. To inform change and restructure our current teacher education training programs with regard to preparing general education teacher candidates, we must first understand the specifics of current preparation as well as its strengths and weaknesses. With the expertise of large member groups who comprise INTASC and NJCLD, a list of preferred knowledge and skill competencies that general education teachers need with regard to educating students with disabilities has been devised by each organization. Whether institutions of higher education or state licensing bureaus are requiring any of these skills or knowledge for program graduation or initial teacher licensing has not been determined or shared with the research communities. Further research is required to investigate current general education teacher training programs and teacher licensing requirements pertaining to the nature and depth of preparation for working with students with disabilities who spend part or all of their school day in general education settings. Skill competencies required of general education teachers need to be identified as a starting point in

order to understand areas in which more preparation is needed. These skills can be compared with preferred skills recommended by the credible expertise of INTASC and NJCLD.

This study was designed in an attempt to determine some of the unanswered questions and to address some of the present gaps in the literature. Chapter 3 contains a description of the methodology used to investigate elementary education teacher preparation programs in each state to determine the knowledge and skills required of teacher candidates across the United States by university general education teacher training programs and state teacher licensing boards, with regard to teaching students with disabilities in their classrooms.

CHAPTER 3 - Methodology

Although a continuum of services for students with disabilities is mandated under the auspices of Least Restrictive Environment (IDEA, 2004), there is an ever-increasing tendency to place these students in regular education settings. General education classrooms have become the default setting. Consequently, the once historically isolated responsibilities and agendas of special education and general education have been eroded by policies of NCLB and the most recent IDEA reauthorization. Both facets of the United States' system of education are becoming increasingly intertwined as general and special educators share responsibilities for teaching students with disabilities. General and special education have continued to have many very different responsibilities, but they are not entirely separate. Failure to dismiss the notion of each being separate *in every respect* may have the ultimate potential to hinder successful achievement of general education learning outcomes (NCLB requirement) by some students with disabilities. Shared responsibilities must be addressed and corresponding skills taught during teacher preparation. If teachers are not prepared then it would seem logical that successful achievement by students with disabilities would be hindered. It is reasonable to deduce, consistent with students who have disabilities being educated in the general education setting, that required outcomes for general education teacher candidates should include competencies that can provide them with skills to successfully teach children with special needs who are in their classrooms. It is not until then that opportunities for these children to achieve general education learning outcomes can be maximized. General educators cannot be expected to meet the same strict skill criteria by which special educators are licensed, but if children with special needs are being educated in general classrooms, then it seems reasonable to expect teachers to have teaching skills for teaching them. Unfortunately, there are no consistent preservice requirements in

general education teacher-training programs across the United States relative to educating students with disabilities. Organizations such as INTASC and NJCLD have made recommendations for preferred skills for preservice general educators. What states and universities do with the recommendations vary. Some states, for example, do not even require a special education requirement for preservice general education teachers (NASDTEC, 2005). Consequently, one might infer that IHEs continue to look at general and special education as different entities with very different responsibilities and teacher-training programs may not be aligned with the current trends encouraged by the federal agenda for education. For that reason, the question for this study was, *What and to what extent are skills being taught in elementary education preservice training programs that will prepare teacher candidates to teach students with disabilities who are in regular classrooms?*

Data for this study were collected using a survey designed and written by the investigator with primary guidance from Don A. Dillman's, *Mail and Internet Surveys: The Tailored Design Method* (2007). Care was taken to reduce sampling, coverage, and measurement errors. Furthermore, the researcher worked conscientiously to eliminate errors and problems related specifically to web questionnaires and to insure efficient organization. Clear instructions were provided within the survey to make navigation through it easy.

All phases of the research methodology are reported in this chapter in following sections: (a) research questions, (b) research sample, (c) identifying and locating the sample, (d) conducting the pilot study, (e) developing the web-survey package, (f) administering the survey, (g) data analysis, and (h) reliability and validity.

Research Questions

1. How many state departments of education require at least one special education course for an initial elementary education teaching license?
2. How many institutes of higher education require completion of additional (beyond state requirements) special education coursework in their elementary teacher preparation programs?
3. How many elementary general education teacher preparation programs have faculty trained in special education teaching coursework related to teaching students with disabilities in general education classrooms?
4. The Intercollegiate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee on Learning Disabilities (NJCLD) have compiled a list of preferred knowledge and skills for general education teachers who share the responsibility of educating children with disabilities. Based on Bloom's taxonomy, what is the highest level at which teacher candidates in the United States are *taught* about these preferred skills?
5. Based on Bloom's taxonomy, what is the highest level at which elementary education teacher candidates in teacher training programs in the United States are *assessed* on knowledge and skills (INTASC and NJCLD) pertaining to educating children with special needs in the general classroom?
6. Which knowledge and skill areas do faculty in teacher training programs in the United States believe their elementary teacher candidates are prepared well enough to be able to provide class members who have disabilities opportunities for meaningful participation

and access to learning experiences that will bring about progress through the general curriculum?

7. Do faculty in elementary education preservice preparation programs at IHE's in the United States believe that it is reasonable to require elementary education teacher candidates to acquire *all* preferred competencies recommended by INTASC and NJCLD?
8. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *taught* and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?
9. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is *assessed* and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?
10. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and whether special education trained faculty teach preservice teachers about special education related issues?
11. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and whether special education trained faculty teach preservice teachers about special education related issues.
12. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and whether the university has a special education degree program?
13. Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and whether the university has a special education degree program?

Research Sample

The survey in this study targeted traditional large elementary education teacher training programs in each state. The researcher used a purposeful sample: the three traditional teacher preparation programs in each state with the largest number of licensure eligible elementary education program completers. Participants were required to to be very knowledgeable about the overall program curriculum for elementary education teacher preparation at their respective universities. Hence the researcher contacted department chairpersons first. Participants were also required to be teachers of special education content in elementary education teacher preparation programs. The researcher included a survey question, Question 8, as a means to filter out those individuals first contacted. If a respondent did not teach such content, he or she was directed to a survey question that asked for a name, email address and phone number of a person who did. The survey packet, including prenotices, was sent to each person referred via the questionnaire.

Every person who began the survey, including those who only answered the first 8 questions, were included in the original data reports. As a result, it was likely that some universities had the opportunity to answer the first eight questions twice. The researcher's intent was to have only one person from each university represent their elementary general education teacher training program and complete the questionnaire. If the person began the survey, for example, he or she would have indicated the number of licensure-eligible teacher graduates who completed their program. Then, it was possible to get to the eighth question and be redirected to item 25, which asked for a referral to another faculty member. In such a case where another faculty member from the same university responds to the questionnaire, that IHE's program completer numbers would have been counted twice generating an inaccurate number overall.

Consequently, the researcher used filters included in the SPSS software to filter out any responses associated with a person who was redirected by the survey to discontinue and refer another person. As a result, the chance of a university being able to report the number of licensure eligible program completers twice, was eliminated. Of the 95 subjects who responded, 72 of them met all the participant criteria and were allowed to complete the survey. When asked, "On average, how many licensure eligible elementary teacher program completers does your university have each year," three of the 72 responders did not respond with a number. In the case where a respondent gave a range (e.g. 200-250) the researcher used the average number. The remaining 69 universities represent approximately 15,075 new elementary education teachers whose teaching preparation in regard to students with disabilities in general education classrooms is explained, in part, by this study.

The purpose for asking faculty from universities with the greatest number of elementary general education program completers was that the sum of students represented comprised the greatest number of new teachers entering the field in the United States each year.

Identifying and Locating the Sample

The researcher implemented the following steps to insure a complete and accurate list of participants:

Step 1: Using the Internet, the researcher located a list of state administers for teacher certification in each state and the District of Columbia.

Step 2: The researcher made 1 – 3 attempts to contact each state administrator (by email), asking for (a) the name of the three universities in their state that graduate the largest number of licensure-eligible elementary general education teacher candidates and (b) a program contact name and email address for each one (see Appendix A, the Letter to State Administrators).

Twenty-two of the 51 inquiries were answered and each of them provided university names. Of the twenty-two, however, only 16 provided both a contact name and the contact's email, one responder provided a telephone number for each of the three universities and five responders answered the first question only.

Step 3: Using information in faculty directories on university websites, the researcher was able to determine whether the contact who was referred by state administrators met criteria for the research sample. If they did not, the researcher searched the university's teacher education or elementary education webpage to locate a faculty member for whom the search was unsuccessful or the researcher sought assistance by calling the university office associated with elementary teacher preparation program. The phone numbers were obtained on university web pages.

Step 4: The researcher continued the search to complete a full roster of research participants. The most current state Title II reports were used to establish the list of three universities in each state that graduate the largest number of licensure-eligible elementary general education teacher candidates for the states in which no data was generated from state administrator contacts.

Step 5: After completing the list of universities via Title II reports, the researcher located the remaining university's' teacher education or elementary education program web pages to create the list of eligible research participants.

Step 6: A note of thanks was sent to state administrators who responded.

Developing the Web-Survey Package

Preparing the Survey

To obtain data specific to the research questions, the researcher developed a web survey instrument using an online survey tool called "Survey Monkey," which employed a combination of CSS, JavaScript and HTML to generate the survey. Additionally SSL encryption was applied to insure a secure connection between the participants and the server. To distribute the survey, the researcher posted it on the Survey Monkey web server and sent a web link to each participant via a personal email.

Structure of the Web-Survey Package

Cover Letter: The cover letter which was part of the questionnaire (see Appendix C, Cover Letter) included a request for participation and informed the participants of the purpose of the study, the basis for participant selection, the usefulness of the survey, an explanation of survey confidentiality, an invitation to ask questions of the researcher, and instructions for answering and submitting the survey.

Questionnaire: The questionnaire (see Appendix E, Questionnaire) included a cover letter and five sections: demographics, knowledge and skills coursework (teaching), knowledge and skills coursework (assessment), views about preservice preparation, and a section for personal comments.

Section A: Demographics

The first section of the questionnaire included five questions. Questions one and two asked about the survey responders' faculty position and leadership roles. The remaining three questions asked the respondent about his/her university's elementary general education

preparation program (i.e. the average number of program completers each year, whether their university has a special education program and whether their university has special education trained faculty teaching the special education content to general education majors). The data collected from this section gave the researcher information about the faculty who completed the questionnaire as well as the number of future teachers across the United States collectively trained by them.

Section B: Knowledge and Skills Coursework (Teaching)

This section of the questionnaire contains four questions (6 - 9) designed to elicit responses to research questions 2, 4, 9 and 12 as well as to assist in making the final participant qualification check. Survey question number 6 gave the researcher background information about the university's special education requirements for preservice elementary general education teachers. Survey questions 7 and 8 provided data about the delivery format for teaching special education content (e.g. special course, infused into other courses, etc.) and whether the faculty member completing the survey was responsible for teaching that content. Since the researcher intended study participants to be faculty members responsible for teaching special education requirements to elementary general education preservice teachers, this survey item served as a final participant screening. Persons who did not meet the final screening criteria were directed to the survey location that requested the name and email address of a colleague who would be more suited to participate. The final survey question in this section, question 9 asked each university respondent about the level to which specific skills were taught (according to Bloom's taxonomy) in his/her program. The purpose for this question was to determine the overall level at which new teachers are prepared as it relates to recommended preferred knowledge and skills needed for teaching students with disabilities in general education settings

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Section C: Knowledge and Skills Coursework (Assessment)

The intention of Section C was to determine, overall, whether preservice elementary general education candidates, if taught, were being held responsible (as judged by assessment performance) for the preferred knowledge and skills recommended by INTASC and NJCLD. This section contained one question (survey question 10) that asked the respondent from each respective university to indicate the highest level, according to Bloom's Taxonomy (2000) at which students were being assessed on each of the aforementioned skills. Furthermore, the researcher sought to determine whether there was a significant difference between the highest level at which skills were being taught and the highest level at which they were being assessed. The researcher also used data collected from this section of the questionnaire to answer research questions 5, 10, and 13.

Section D: Views about Preservice Preparation

Section D contained fifteen items that provided the researcher with information relevant to research questions 9, 10 and 11. It brought forth faculty opinions about their programs' special education requirements and whether they believed it reasonable to expect elementary general education teacher candidates to acquire all of the skills recommended. Additionally, participants were asked, by individual isolated knowledge and skills, if they believed their students were adequately prepared to meet challenges posed by educating students with disabilities in general education settings. Participants responded to Likert-type questions.

Section E: Comments and Confirmation Notice

One open-ended question was included in Section E to give participants the option to

comment about a particular question, the survey, their university and/or about preservice preparation for elementary general education teachers as it pertains to educating students with disabilities in general education classrooms.

Confirmation notice: Once faculty members submitted the questionnaire, the web server sent a confirmation notice and thanked them for completing the survey.

Conducting the Pilot Survey

After creating the survey questionnaire, the researcher solicited assistance from the researcher's doctoral committee members. Each member was given a hard copy of the survey draft and the study questions for review. The researcher also included a copy of questionnaire construction guidelines recommended by Dillman (2007) and asked that they be considered:

- Were all necessary questions included?
- Were there questions that I could omit?
- Did I use categories appropriate to study goals?
- Did the survey measure what it was intended to measure?
- Were all of the words understood?
- Were there any difficulties related to interpreting the questions?
- Were all questions answerable by participants?
- Were respondents likely to answer each question?

When the review was complete, the reviewers and the researcher met together to discuss suggestions and comments. The following adjustments were made

- changed from two forms of the survey (Form A and Form B) to one survey. To accommodate the use of one survey a skip question, specifically question 8, was

used as a filter during data analysis.

- Changed from stems for each question, 13 – 22, to one general stem that applied to each question.
- Changed from individual questions to matrices for the 24 survey items pertaining to the level at which given skills were taught and assessed.
- Changed from the use of Bloom's original taxonomy (1956) to the more recent, updated version (1999).

Each member was offered a final copy of the survey.

Pilot Study

After the survey instrument was finalized, it was uploaded to *Survey Monkey,* an online survey tool, at www.surveymonkey.com. The web survey's appearance was tested on five different operating systems to check for any potential and correctable viewing differences.

Next the researcher requested permission from the University Research Compliance Office, Committee for Research Involving Human Subjects (IRB), to carry out the study. Upon approval, the researcher administered the survey to two pilot groups of university faculty, Pilot Group A and Pilot Group B. Responses from both pilot studies were confidential so the researcher was not able to identify individual responses unless disclosed by the participant.

Pilot Group A, comprised of 5 faculty members from Kansas State University and a special education consultant who agreed to participate, were given a hard copy of the survey on May 4, 2009. The researcher also emailed a survey link providing web access to the survey. Participants were asked to respond to survey questions noting any language, procedural, appearance, or other survey characteristics that needed clarification or revision. They were asked to report any difficulties they may have experienced in accessing the survey online, their feelings

about navigating through the survey, or any other aspects of the survey that needed attention. The researcher also asked Pilot Group A to note the time taken to complete the survey. As a result of their review, a change was made. Rather than including a list and explanations of the preferred knowledge and skills on the survey, the researcher created a web link from three of the survey questions to a web page of the definitions. There was no feedback regarding survey completion time and the problems associated with survey access were corrected.

Next, the survey packet, including a copy of the study questions, was sent to elementary and secondary education department chairs at universities in Kansas that did not meet criteria for the study and therefore were not in the research sample. This group was referred to as *Pilot Group B*. The survey link and a copy of the researcher's study questions were sent to each participant via email and a hard copy was sent through the United States Postal Service. The researcher asked them to complete the survey noting any characteristics of language, procedures, appearance, or other survey component that needed clarification or revision as well as the amount of time it took each participant to complete. They were also asked to note any difficulties regarding access to and navigation through the survey and to pay careful attention to any questionnaire characteristic(s) that might compromise the survey's validity and/or reliability. Participants completed the survey and this comment was suggested for consideration. "In "weeding out" faculty from your initial contact, you might want to ask what degree they have, what their area of speciality is, and whether or not they are currently aware of requirements in the elementary education program and/nor teach in the program." My committee and I had discussed this issue prior to the pilot study and decided, for the purpose of my study, it was unnecessary.

Administering the Survey

First contact: A prenotice was emailed to study participants on November 2 (see Appendix B, Prenotice Letter to Survey Sample). The researcher encouraged participation, reminded participants of the survey's importance, and advised them to look for a follow-up email containing a web link to the questionnaire.

Second contact/follow-up: A link to the web survey packet was emailed on November 9, 2009 (Appendix). It contained a brief cover letter informing participants of the purpose of the study, the participant selection process, and instructions for completing and submitting the survey. Following this contact, 58 surveys were submitted.

Third contact: The researcher made a third contact on December 14, 2009, sending a thank you to individuals who responded and a note encouraging non-responders to participate. This contact included a link to the questionnaire. Sixteen respondents submitted completed surveys following this communiqué.

Fourth contact: On January 29, 2010, the researcher mailed a brightly colored postcard to each person in the research sample that extended thanks to those who completed the survey and encouraged the others to complete it via a web link that would be sent in an email on Friday, February 5, 2010. Participants were also asked to confirm their survey completion if they would like to be included in a drawing for a $75.00 Visa gift card.

Fifth contact: A link to the web survey packet was emailed on February 5, 2010. Twenty-one surveys were completed as a result of this final contact with participants.

Data Analysis

An excel report generated by *SurveyMonkey's* data analysis system was imported into the statistical software program, SPSS. Once the data set was dummy coded as necessary and prepared for analysis the researcher began analyzing data gathered from the email survey,

Students with Disabilities in General Education Settings: General Education Teacher Preparation. Descriptive statistics, primarily frequencies, percents, and mode were run on survey questions applying to research questions 2 – 7. In several instances, the researcher reported response ranges to highlight critical inconsistencies in universities' elementary general education teacher preparation programs across the United States. In only one circumstance, to illustrate likenesses and differences between the highest levels to which skills are taught and the highest levels at which they are assessed, means were used. The results for each survey question are reported separately in Chapter 4.

Research Questions 1 - 7

Research Question 1: How many state departments of education require at least one special education course for an initial elementary education teaching license or certificate? Information to answer this question was gathered from Title II reports and letters of inquiry sent by email to departments of education in each of the fifty states and the District of Columbia. The information gathered describes one of three different situations: (a) the state requires that preservice elementary general education teachers take a separate class designed specifically to teach general educators about students with disabilities (b) the state has content standards that address teaching all students including students with disabilities or, (c) the state has no special education requirement for preservice elementary general educators seeking initial licensure. Results for this question are reported with frequencies and percents (narrative) for each of the three situations previously explained.

Research Question 2: How many institutes of higher education require completion of additional (beyond state requirements) special education coursework in their elementary teacher preparation programs?

To collect evidence supporting research question 2, the researcher used a multiple choice survey question format that offered options of "one additional course", "two additional courses", "three additional courses", "four or more additional courses," and "other." These data were reported as frequencies and percentages. Additionally, optional comments from those who answered "other" are quoted and included in the appendix.

Research Question 3: *How many elementary general education teacher preparation programs have faculty trained in special education, teaching the coursework related to educating students with disabilities in general education classrooms?*

Participants answered either "yes" or "no" to this question or were given the option to respond, "N/A (no separate coursework is required in our program). "Frequencies and percents are included in narrative format in Chapter 4.

Research Question 4: Based on Bloom's taxonomy, what is the highest level at which teacher candidates in the United States are taught about the preferred skills compiled by the Intercollegiate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee on Learning Disabilities (NJCLD) for general education teachers who share the responsibility of educating children with disabilities?

Bloom's taxonomy is a respected means with which to measure levels of thinking required for concept development and assessment of understanding. In 1956, Bloom led a group of psychologists who developed this taxonomy of levels of intellectual functioning involved in learning. The original taxonomy had six levels: knowledge, understanding, application analysis, synthesis, and evaluation. Specific levels of the taxonomy were each described by verbs (e.g., arrange, calculate, choose, relate, recall). During the 1990s a student of Bloom's, Lorin Anderson, and a group of cognitive psychologists "updated the taxonomy reflecting relevance to

21st century work" (Overbaugh & Schultz, 2009). The levels, remembering, understanding, applying, analyzing, evaluating, and creating are described using verbs such as define, list, appraise, defend, construct, assemble, etc. The researcher used the updated taxonomy for this study.

The questionnaire response choices required participants to indicate the highest level (from Bloom's taxonomy) to which students were taught each preferred skill. While conducting data analysis, the researcher assigned this numeric dummy code to each level:

- Not taught: 0
- Remembering: 1
- Understanding: 2
- Applying: 3
- Analyzing: 4
- Evaluating: 5
- Creating: 6

Data are reported as frequencies, percents, and modes. These data are shown in a table to illustrate the depth/level to which knowledge and skills are taught, the level to which they are most often taught (mode), and the range of responses among university respondents. A median statistic is reported indicating the overall level to which special education knowledge and skills are in university programs training elementary education teacher candidates.

Research Question 5: *Based on Bloom's taxonomy, what is the highest level at which elementary education teacher candidates in teacher training programs in the United States are assessed on knowledge and skills (INTASC and NJCLD) pertaining to educating children with special needs in the general classroom?*

Responses for this question are also reported as frequencies, percents, and modes. Analyzing responses have been completed and reported in the same way as for Question 4. In addition, a bar graph illustrates differences in *mean* scores between the highest level taught and the highest level assessed to provide a visual representation of differences and the range of responses. This is the only instance in this study that means are used.

Research question 6: *In which knowledge and skill areas do faculty in teacher training programs in the United States believe their elementary teacher candidates are prepared well enough to be able to provide class members who have disabilities opportunities for meaningful participation and access to learning experiences that will bring about progress through the general curriculum?*

Data to answer this inquiry were gathered through 10 different survey questions with Likert-type responses options: "strongly agree," "agree," "unsure," "disagree," and "strongly disagree." Each of the 10 questions targeted a different knowledge/skill competency from the list generated by INTASC's and NJCLD's recommendations. Frequency counts and percents were used to present the study findings for this question and a table that includes such information as well as modes for each skill area is included in Chapter 5.

Research question 7: *Do faculty in elementary education preservice preparation programs at IHE's in the United States believe that it is reasonable to require elementary education teacher candidates to acquire all preferred competencies recommended by INTASC and NJCLD?*

This question can be answered by data gathered from survey questions 11 and 12. The first of the two survey questions asked for a "yes" or "no" response. The second of the two survey questions asked for each respondent's rationale. A narrative summary of frequencies and

percents collected through Question 11 and of responses to survey Question 12 is written in Chapter 5. Appendix K contains each quoted rationale statement.

Research Questions 8 – 13

The researcher attempted to analyze research questions 8-13 using loglinear analysis, a method of analysis that provides a way to examine data when the variables are all categorical (Thompson, 2006). It works well when there are no definite independent and dependent variables as in this current study. In this type of analysis differences among groups are identified and examined. First, these analyses provide an indication of whether there are differences and then they look at specific relationships among variables providing the researcher a method to pinpoint where differences occur among groups (Thompson, 2006). Loglinear analysis also checks for a goodness-of-fit and can test all possible individual combinations that can be created within a data set (Thompson, 2006). The frequency associated with each cell, however, has to be greater than 1 and only 20% of the cells may contain a frequency of less than five. When too small a frequency occurs, power can be reduced within the results (Tabachnick & Fidell, 1996). Pertaining to the present study, inadequate frequencies occurred in all cases, rendering this type of analysis unworkable. In the same way, Spearman Rho analysis that can detect associations between ordinal variables was not viable. With these facts in mind the researcher used frequencies, percents, and modes to illustrate findings. The median was used to describe an overall, combined level to which both the knowledge/skills are taught and the level at which they are assessed. Narratives, tables, and graphs are also used in Chapter 4 and in the appendices to illustrate results.

Research Questions 8: *Is their a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and the faculty members' beliefs that students from their*

elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?

Research Question 9: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?*

Table 3.1: Are Preservice Elementary General Educators Adequately Prepared Regarding Special Education Knowledge

		Agree	Unsure	Disagree
Knowledge and Skills	IDEA Law n=58	41 (70.7%)	9 (15.5%)	8 (13.8%)
	IEP Process n=57	25 (43.8%)	17 (29.8%)	15 (26.3%)
	Implement IEP n=57	37 (64.9%)	14 (24.6%)	6 (10.5%)
	Instruction n=57	36 (63.2%)	12 (21.1%)	9 (15.8%)
	Technology n=57	24 (42.1%)	19 (33.3%)	14 (24.6%)
	Social Development n=56	36 (64.3%)	12 (21.4%)	8 (14.3%)
	Strategies n=57	36 (63.2%)	10 (17.5%)	11 (19.3%)
	Behavioral Management n=57	29 (50.9%)	15 (26.3%)	13 (22.8%)
	Collaboration n=57	44 (77.2%)	10 (17.5%)	3 (5.2%)
	Support Services n=57	30 (52.6%)	13 (22.8%)	14 (24.6%)

For the purpose of increasing statistical power for data analysis to answer questions eight and nine the researcher chose to combine responses dividing them into three, rather than five, categories. The five survey response options were (a) strongly agree, (b) agree, (c) unsure, (d) disagree and (e) strongly disagree and then were combined as follows: (a) Agree, which included both "agree" and "strongly agree" responses, (b) Disagree that included responses

"disagree" and "strongly disagree," and (c) Unsure, which included the response choice, "unsure." Table 3.1 shows data as they occur in each of the three categories. Unfortunately, cell sizes were nevertheless inadequate to run appropriate statistics and relationships between variables could not be determined.

Research Question 10: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and whether special education trained faculty teach preservice teachers about special education related issues*

Research Question 11: Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and whether special education trained faculty teach preservice teachers about special education related issues?

As a result of inadequate cell size, the relationships in question could not be determined statistically. A narrative explanation answering research Questions 10 and 11 is included in Chapter 4. Chapter 4 also contains charts that show responses given by the five universities that do not have special education trained faculty teaching content related to including students with special needs in general education classrooms. The charts highlight modes determined by examining responses from all subjects in the sample who answered the corresponding research questions.

Research question 12: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and whether the university has a special education degree program?*

Research Question 13: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and whether the university has a special education degree program?*

These data were collected by survey Question 4 which asked if the university where the faculty respondent worked had a special education degree program, Question 10 which inquired about the highest level to which preferred knowledge and skills were taught and Question 11 that sought the highest level at which students were assessed on preferred skills. Analyzing these questions statistically was unachievable. Seventy of the 72 respondents indicated that their university had a special education degree program and only two did not. Since only two of the 72 respondents indicated that their university does not have a special education degree program, group differences were not calculated and pairwise differences were not assessed. The small number of respondents makes such analyses unfeasible.

To look for similarities or differences that might reveal something meaningful that set them apart from the others, the researcher studied response patterns from the two subjects. Specific data on each of these survey questions is reported in Chapter 4, along with charts portraying responses given by the two universities that do not offer a special education degree program.

Validity and Reliability

While creating the survey, the researcher followed guidelines outlined by Don Dillman (2007), to eliminate four sources of survey error, sampling, coverage, measurement, and non-response error (see table 3.1). The researcher assessed each survey question by referring to the following six of eight inquiries that, according to Dillman, 2007 (pp. 34-40), help diagnose problems and guide structural and wording decisions appropriate for creating valid, reliable surveys:

1. Does the question require an answer?
2. To what extent do survey recipients already have an accurate ready-made answer for the

question they are being asked to report?

3. Can people accurately recall and report past behaviors?
4. Is the respondent willing to reveal the requested information?
5. Will the respondent feel motivated to answer each question?
6. Is the respondent's understanding of response categories likely to be influenced by more than words?

The researcher asked the study committee to assist in assessing each question by doing the same. After creating the survey packet and diagnosing and revising survey questions (as needed), the researcher solicited assistance from her doctoral research committee members and another Kansas State University College of Education faculty to review the survey instrument for the purpose of determining face and content validity. A list of guiding questions for reviewers is printed under the subheading, "*Pilot Study."* The researcher completed reliability and validity testing by conducting a pilot study with two separate groups of university faculty:

Pilot Group A: faculty from Kansas State University's College of Education

Pilot Group B: elementary and secondary education department chairs at universities in Kansas that did not meet criteria for the proposed study and were not be members of the study group.

CHAPTER 4 - Analyzing the Data

This chapter is structured in three main sections: (a) Characteristics of Surveyed Faculty, (b) Data Analysis: Questions 1 – 7, and (c) Data Analysis: Questions 8 – 13. The first section presents frequency data pertaining to characteristics of surveyed respondents. The second section discusses answers to research questions 1 – 7 that are reported as frequency counts and the third section provides the observation for questions 8 - 12 which were designed to determine whether there were associations between variables and if so, their effect sizes.

Characteristics of Surveyed Faculty Members

One hundred and fifty three faculty members from the three universities in each state and the District of Columbia that produce the largest number of elementary general education teacher program completers each year were invited to participate in this study. Ninety-five (62%) responded, 23 of whom were filtered out because they did not meet the final participant screening criteria.

The final and most important criterion for suitable respondents was that they teach special education content in their university's elementary general education teacher preparation program. Thus, a final screening question, survey question eight, asked respondents if they taught special education requirements. If they did not, the survey redirected them to a question that provided space to refer another faculty member who did. The final number of participants whose responses were included in data analyses was 72 (47%). They represent characteristics of teacher training programs for approximately 15,075 elementary general education program completers across the United States. Forty percent were Full Professors followed by Associate

Professors at 29%, Assistant Professors, 11.6%, and Instructors, 5.3%. The remaining 10.5% of respondents marked "other" and provided specific answers quoted:

- *"Endowed Professorship"*
- Chair of the Department of Teaching and Learning"
- "Director of Teacher Education and Teaching, *Assistant Professor"*

Table 4.1. Faculty and Teacher Training Program Demographics

Characteristics	Frequency	Percent
Faculty Position		
Instructor/Lecturer	2	2.8
Assistant Professor	25	34.7
Associate Professor	11	15.3
Professor	32	44.4
Other	7	9.7
Offer Special Education Teaching Degree		
Yes	70	97.2
No	2	2.8
Special Education (SpEd) Faculty Teach SpEd Requirements		
Yes	65	90.3
No	5	6.9
N/A (no separate coursework is required)	2	2.8
State SpEd Requirement for General Education Teachers		
None	7	13.7
Specific Class (includes 1 state that requires 2 classes)	13	25.5
Infused Through Outcome Standards	26	51.0
Unable to Locate	5	9.8
IHE required *Additional* SpEd Coursework		
No Additional Coursework	39	56.5
1 Additional Course	15	21.7
2 Additional Courses	4	5.6
Other	15	21.7

Note: Respondents who marked "other" are quoted in paragraphs below.
For Faculty Position, one respondent who marked "other," indicated that he or she was an Assistant Professor, one noted Associate Professor, and three indicated that they were Professors. As a result, these five responses were added to the corresponding statistic and remained part of the statistic representing "other" and thus, were counted twice, once for "other" and once under the category noted in the previous sentence resulting in a total percentage for that category being over 100%.
For IHE required additional coursework, four individuals who responded to "other" also fit in another category and were therefore, counted twice. Total percentage for this category will be greater than 100%.

- "Director, Clinical Experience"
- "Director Teacher Education"
- "Program/Administrator and *Associate Professor* in Department of Curriculum and Instruction"
- "Program Advisor/ Department Chair"
- "*Professor* and Interim Chair"
- "Teacher Education Department Head"
- "*Regents Professor* and Director of Elementary Education"
- "*Professor*, Assistant Chair"

Notice the quoted entries that are consistent with a category in Table 4.1. The researcher italicized them in the list above to highlight the fact that they were subsequently added to frequency counts. Since respondents could only mark one choice, adding to the frequencies and percentages did not pose a duplication risk. Study participants' characteristics are illustrated in Table 4.1.

Special education requirements vary from state to state and among universities. When asked about university requirements beyond what the state requires for initial elementary general education licensure, respondents could indicate "no additional coursework," "one additional course," two additional courses," "three additional courses," "four or more additional courses," or "other." Frequency of each response option is presented in Table 4.1.

Respondents who marked "other" responded as quoted:

- "People who are special ed certified are also el certified"
- "Several apply – we require courses, we offer electives and we infuse throughout all professional coursework"

- "We have opened the first 9 hours of our graduate Adaptive SpEd program to students starting in their junior year. Upon graduation, candidates electing to complete these courses can have provisional endorsement upon graduation."
- "Our elementary general education teacher candidates are required to take a course focusing upon teaching students with special needs. They also complete the entire set of CHAMPs modules to learn how to help all students make good behavioral choices. Furthermore, every methods course integrates information about meeting students' special needs."
- "Students may also take additional coursework in special education after they take the required foundation course."
- "Pre-service teachers are placed in public schools where students with disabilities are included. Their participation in pre-referral, referral and IEP development varies based on their placements. While the required special education occurs early on in students' programs, it does prepare pre-service teachers to problem solve and think about their role. Pre-service teachers are also introduced to differentiated instruction in their methods courses, preparing them to look at individual needs. With that said, there is room for extending competencies with regard to collaboration and approaches to direct instruction, modifications/academic and behavioral interventions."
- "We have a unified general and special education certification program options for elementary and secondary education. Candidates complete requirements for recommendation for both the certificates and a Master's degree within a coordinated curriculum."

- "We have an elementary program in which students take one course regarding special education. However, we also have an integrated elementary/special education program in which students take all courses needed for both an elementary and special education license."
- "the course mentioned in not high quality. It's a course that we designated as having the "basics" of Special Education."
- "All elementary ed candidates are required to take one course (meeting the needs of diverse learners) related to teaching students with disabilities. The only way to gain additional knowledge is to select a special education minor."
- "In addition to the specific course and application in student teaching we have the applications for diverse learners course in the previous item."
- "20 hour field experience during the one special education course."

After extracting and evaluating the responses from the *72* individuals who were allowed to complete the entire survey, 46 (63.9%) were department chairpersons and three were recent past chairpersons, 17(23.6%) were program coordinators, 6 (8.3%) noted roles as program directors; there were 3 (4.1%) Associate Deans and 1 (1.4%) Interim Dean, 2 (2.8%) elementary education program/team leaders, 2 (2.8%) licensing administrators, and 3 (4.1%) persons who serve on various committees.

A majority of teacher training programs (62; 86.1%) represented in this study provide preservice elementary education teachers with information about special education related issues in at least one class designed specifically for that purpose. Notably, one respondent indicated that this class at his/her university was "not high quality." Thirty-two (44.4%) teach special education content by infusing it into methods courses. Ten (13.9%) respondents reported that the students

at their universities have the opportunity to take special education courses as electives and 31 (43.1%) elementary general education preservice programs provide specific skills and knowledge related to educating students with disabilities during clinical experiences.

Data Analysis: Questions 1 - 7

The results of survey questions 1 – 7 are descriptive and will be reported in this chapter primarily as frequencies, percents, and modes. In several instances, the researcher reported response ranges to highlight critical inconsistencies in universities' elementary general education teacher preparation programs across the United States. In only one circumstance, to illustrate likenesses and differences between the highest levels to which skills are taught and the highest levels at which they are assessed, means were used.. Tables and graphs were used to supplement or to illustrate narrative explanations of data and are included either within the text of this chapter, or in the appendices.

Research Question 1: *How many state departments of education require at least one special education course for an initial elementary education teaching license or certificate?* Data were collected from each state department and the District of Columbia. A number of these departments provided a specific answer, several directed me to a website, and the remaining information was collected from the 2008-2009 Title II reports. Thirteen (25.5%) of the 51 departments require that elementary education teacher candidates seeking initial licensure complete a specific course related to students with disabilities. Another 26 (51.0%) have content standards that include such knowledge and 7 (13.7%) have no special education requirements. Data were unavailable for 5 (9.8%) states.

Research Question 2: *How many institutes of higher education require completion of additional special education coursework in their elementary teacher preparation programs*

beyond state requirements? Respondents were asked to choose one answer option that best describes their university's elementary general education teacher preparation program regarding requirements for special education knowledge and skills. The following five response options were given:

a) 1 additional course

b) 2 additional courses

c) 3 additional courses

d) 4 or more additional courses

e) Other (please explain in the space provided below)

Sixty-nine subjects responded to the survey item that corresponds to this question. Thirty-nine (56.5%) respondents indicated that their university's program for elementary general education teacher training requires no additional coursework beyond state requirements. Fifteen (21.7%) reported a requirement to take 1 additional course and four (5.8%) respondents noted that students take two additional special education courses. None of the universities surveyed reported that students take more than two additional classes. Fifteen teacher education program representatives (21%) who chose the option, *other,* provided statements to describe their university's special education coursework or additional requirements for the undergraduate degree in elementary general education teaching.

To analyze these qualitative data, I asked this question for each statement, "Is the respondent reporting an additional class, yes or no." Two of them indicated an additional course requirement while two others stated that they "have" a course, but did not indicate whether or not the course was required. Two other respondents said that they did not require any additional coursework and one person indicated that he/she did not know. Another participant reported that

there were no additional courses specific to special education but that the students were required to take a course on Universal Design for Learning to address the learning needs of diverse student populations. The two who noted in their comments that an additional course was required and the two who stated that they required no additional coursework are included in the data report are counted in both categories. All responses are provided in Appendices G.1 and G.2.

Research Question 3*: How many elementary general education teacher preparation programs have faculty trained in special education, teaching coursework related to teaching students with disabilities in general education classrooms?*

Each survey respondent answered the survey question, "Are special education trained faculty teaching the required special education coursework in your general education elementary preservice teaching program?" Sixty-five (90.3%) have special education faculty teaching the special education requirements for elementary general education teacher candidates and five (6.9%) do not. Two (2.8%) of the universities in the sample reported not having any special education requirements.

Research Question 4: *The Intercollegiate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee on Learning Disabilities (NJCLD) have compiled a list of preferred knowledge and skills for general education teachers who share the responsibility of educating children with disabilities* (Appendix J). *Based on Bloom's Taxonomy* (Appendix K), *what is the highest level at which elementary education teacher candidates in teacher training programs are taught about these preferred skills?* Data are ordinal and categorical. Response categories (i.e., each level of Bloom's Taxonomy) have a presumed rank order but the intervals between them cannot be presumed equal. As a result, experts in the field of statistics caution researchers about using means to analyze ordinal data such as those

generated by this study. Although means and standard deviations are often used, statistics textbooks clearly state that for ordinal data researchers should use the median or mode as the measure of central tendency (Blaikie, 2003 & Clegg, 1998). Calculating means and standard deviations requires arithmetical operations that are inappropriate for ordinal data (Blaikie, 2003 & Clegg, 1998). Consequently, using statistics appropriate for interval or ratio data increases the chances of coming to the wrong conclusion about these data and thus frequencies and descriptive statistics that include median, mode, and range were used to present and evaluate these data.

Overall, the data indicate that teaching preservice teachers about *teaching strategies* for working with students with disabilities in general education classrooms was the skill reported most frequently as being taught at the "creating" level (coded, "6"). Responses for this specific

Table 4.2. Levels to Which Knowledge and Skill Areas Are Taught

	Bloom's Taxonomy (frequencies)						
Knowledge of:	Not Taught * (0)	Remembering (1)	Understanding (2)	Applying (3)	Analyzing (4)	Evaluating (5)	Creating (6)
IDEA Law n=63	0 (0%)	11 (17.5%)	**26 (41.3%)**	15 (23.8%)	7 (11.1%)	4 (6.3%)	0 (0.0%)
Characteristics *n*=62	0 (0%)	3 (4.8%)	**16 (25.8%)**	15 (24.2%)	13 (21.0%)	14 (22.6%)	1 (1.6%)
IEP Process *n*=63	2 (3.2%)	7 (11.1%)	16 (25.4%)	**20 (31.7%)**	8 (12.7%)	6 (9.5%)	4 (6.3%)
Implementing IEP n=63	5 (7.9%)	10 (15.9%)	**20 (31.7%)**	13 (20.6%)	6 (9.5%)	8 (12.7%)	1 (1.6%)
Instruction *n*=61	0 (0%)	4 (6.6%)	5 (8.2%)	15 (24.6%)	11 (18.0%)	6 (9.8%)	**20 (32.8%)**
Technology *n*=63	6 (9.5%)	5 (7.9%)	17 (27.0%)	**22 (34.9%)**	7 (11.1%)	6 (9.5%)	0 (0.0%)
Social Development *n*=62	2 (3.2%)	2 (3.2%)	**18 (29.0%)**	**18 (29.0%)**	8 (12.9%)	12 (18.0%)	2 (3.2%)
Strategies n=63	0 (0%)	1 (1.6%)	5 (7.9%)	16 (25.4%)	9 (14.3%)	7 (11.1%)	**25 (39.7%)**
Behavioral Management n=63	2 (3.2%)	3 (4.8%)	9 (14.3%)`	**17 (27.0%)**	10 (15.9%)	8 (12.7%)	14 (22.2%)
Collaboration n=63	0 (0%)	5 (7.9%)	10 (15.9%)	**19 (30.2%)**	11 (17.5%)	6 (9.5%)	12 (19.0%)
Accommodations n=63	0 (0%)	2 (3.2%)	8 (12.7%)	**23 (36.5%)**	8 (12.7%)	5 (7.9%)	17 (27.0%)
Support Services n=62	1 (1.6%)	6 (9.8%)	**25 (41.0%)**	11 (18.0%)	9 (14.7%)	8 (13.1%)	1 (1.6%)

Knowledge /skills Taught

Notes: Underlined values indicate the level from Bloom's Taxonomy most frequently reported (mode) as the highest level that the corresponding knowledge and skill area is taught.
*dummy code for categories.

skill ranged from 1 to 6. Likewise, *instruction* was a skill that university teacher preparation programs taught most often at the "Creating (6)" level and again, responses ranged from 1 - 6.

Five of the thirteen knowledge and skill areas were reported as most frequently taught to level 2 with response ranges from 1 - 5. *Teaching knowledge of social development*, was bimodal with modes of 2 and 3. The remaining six knowledge and skill areas had a mode of 3, indicating that the topic was most frequently taught at the "Applying" level with response ranges of either 5 or 6. The overall level to which knowledge and skills are taught in preservice programs according to data collected in this study was between "Understanding (2)" and "Applying (3)" with a grouped median of 2.37.

Table 4.2 presents response frequencies and percentages and the corresponding level (and dummy code) to which each knowledge/skill is being taught. The level noted most often for each skill (mode) is underlined and in boldface. Appendix H includes a bar graph illustrating these frequencies.

Research Question 5: *Based on Bloom's Taxonomy, what is the highest level at which elementary education teacher candidates in teacher training programs in the United States are assessed on knowledge and skills (INTASC and NJCLD) pertaining to educating children with special needs in the general classroom?* The twelve preferred knowledge and skill areas identified by INTASC and NJCLD are also *assessed* at various levels of Bloom's Taxonomy. Frequencies and descriptive statistics (i.e., mode, median, range) were used to analyze these data. Table 4.3 presents the frequencies for each knowledge and skill area and the corresponding level to which each is assessed with modes in bold print.

Universities represented by the respondents indicated that *teaching strategies* is the skill area marked most frequently as being assessed at the highest level with a mode of 6. The

next highest level at which knowledge/skills were assessed reported modes of 3, Bloom's "Applying" level, for assessing knowledge of special *instruction, behavior management, accommodations,* and *collaboration.*

Seven skill assessments of preservice elementary general education teacher competencies reported a mode of 2. The overall/grouped median for the level at which the preferred knowledge and skills are assessed as measured against Bloom's Taxonomy is 1.91 indicating the level of assessment to be between the "Remembering (1)" and "Understanding (2)" levels.

Table 4.3. Levels at Which Each Knowledge and Skill Area is Assessed

	Bloom's Taxonomy (frequencies)						
Knowledge of:	Not Assessed * (0)	Remembering (1)	Understanding (2)	Applying (3)	Analyzing (4)	Evaluating (5)	Creating (6)
IDEA Law n=57	6 (10.5%)	14 (25.6%)	**20 (35.1%)**	7 (12.3%)	5 (8.8%)	4 (7.0%)	1 (1.8%)
Characteristics *n*=57	2 (3.5%)	4 (7.0%)	**20 (35.1%)**	13 (22.8%)	9 (15.8%)	5 (8.8%)	3 (5.3%)
IEP Process *n*=55	4 (7.3%)	8 (14.5%)	**14 (25.5%)**	13 (23.6%)	11 (20.0%)	2 (3.6%)	3 (5.5%)
Implement IEP n=57	4 (7.0%)	10 (17.5%)	**20 (35.1%)**	9 (15.8%)	8 (14.0%)	4 (7.0%)	2 (3.5%)
Instruction *n*=57	1 (1.8%)	2 (3.5%)	10 (17.5%)	**16 (28.1%)**	9 (15.8%)	5 (8.8%)	14 (24.6%)
Technology *n*=57	5 (8.8%)	8 (14.0%)	**13 (22.8%)**	12 (21.1%)	9 (15.8%)	7 (12.3%)	3 (5.3%)
Social Development *n*=56	3 (5.4%)	4 (7.1%)	**16 (28.6%)**	8 (14.3%)	12 (21.4%)	10 (17.9%)	3 (5.4%)
Strategies n=57	0 (0%)	1 (1.8%)	9 (15.8%)	16 (28.1%)	7 (12.3%)	7 (12.3%)	**17 (28.8%)**
Behavioral Management n=57	2 (3.5%)	5 (8.8%)	12 (21.1%)	**13 (22.8%)**	5 (8.8%)	9 (15.8%)	11 (19.3%)
Collaboration n=56	1 (1.8%)	4 (7.1%)	10 (17.9%)	**19 (33.9%)**	8 (14.3%)	5 (8.9%)	9 (16.1%)
Accommodations n=56	1 (1.8%)	3 (5.4%)	11 (19.6%)	**16 (28.6%)**	5 (8.9%)	6 (10.7%)	14 (25.0%)
Support Services n=56	2 (3.6%)	9 (16.1%)	**19 (33.9%)**	12 (21.4%)	7 (12.5%)	5 (8.9%)	2 (3.6%)

Knowledge /skills Assessed

Notes: Underlined values indicate the level from Bloom's Taxonomy most frequently reported (mode) as the level at which the corresponding knowledge and skill area is assessed.
*dummy code for categories

Appendix I contains a bar graph to illustrate these data. Appendix J presents a bar graph of the overall levels to which each knowledge and skill area is taught and assessed. It gives

a visual representation of the differences in *means* between the level to which knowledge and skills are taught and the level at which they are assessed. This is the only instance in the study in which means are used.

Research Question 6: *In which knowledge and skill areas do faculty in teacher training programs in the United States believe their elementary teacher candidates are prepared well enough to be able to provide class members who have disabilities opportunities for meaningful participation and access to learning experiences that will bring about progress through the general curriculum?* These data were gathered with 10 different survey questions. A Likert scale of "strongly agree," "agree," "unsure," "disagree," and "strongly disagree," was used to categorize responses. Data revealed that overall, the 57 university faculty respondents agreed most (36; 63.2%) that students have learned enough about *learning strategies* designed to help them teach students with disabilities so that they would integrate these strategies regularly in their teaching day. Nine (15.8%) respondents strongly agreed and 27 (47.4%) agreed. Eleven respondents disagreed (9 (15.8%) disagreed and 2 (2.8%) strongly disagreed). The remaining 10 (17.5%) respondents indicated that they were unsure. Equally, 63.2% of faculty respondents agreed (i.e., agreed, 24 (42.1%); strongly agreed 12 (21.1%)) that their elementary general education program completers had learned enough about methods and techniques (instruction) for instructing students with disabilities to consider them while planning and to use these instructional techniques to teach the students with disabilities in their classrooms. Twelve (21.1%) faculty were unsure about whether they believed their program completers were prepared well enough and nine or 15.8% noted that their university's program completers were underprepared (i.e., 8, (14.0%) disagreed and 1 (1.4%) strongly disagreed) to consider special instructional methods and techniques while planning. Universities whose programs are

represented by 57 respondents disagreed most often with the belief that their teacher program completers have a deep enough understanding of the IEP meeting process that they can participate with confidence. Twelve (21.1%) individuals replied, "disagree" and three (5.3%), "strongly disagree." Considering teacher program completers' knowledge of the IEP meeting process, 25 (43.9%) faculty respondents felt that their program completers had a "deep enough" understanding (three (5.3%) strongly agreed, and 22 (38.6%) agreed). Seventeen responders (29.8%) were "unsure." Similarly, faculty disagreed that program completers had learned enough about assistive and instructional technology designed to help students with disabilities to recognize when it is needed and also disagreed that these new teachers would seek appropriate

Table 4.4: Faculty Belief that Preservice Elementary Education Training at Their University are Adequately Prepared Regarding Specific Special Education Knowledge

	Frequency (percent)				
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
IDEA Law n=58	11 (19%)	**30 (51.7%)**	9 (15.5%)	7(12.1%)	1(1.4%)
IEP Process n=57	3 (5.3%)	**22 (38.6%)**	17 (29.8%)	12 (21.1%)	3 (5.3%)
Implement IEP n=57	6 (10.5%)	**31 (54.4%)**	14 (24.6%)	5 (8.8%)	1 (1.8%)
Instruction n=57	12 (21.1%)	**24 (42.1%)**	12 (21.1%)	8 (14.0%)	1 (1.8%)
Technology n=57	4 (7.0%)	**20 (35.1%)**	19 (33.3%)	11 (19.3%)	3 (5.3%)
Social Development n=56	7(12.7%)	**29 (51.8%)**	12 (21.4%)	7 (12.5%)	1 (1.8%)
Strategies n=57	9 (15.8%)	**27 (47.4%)**	10 (17.5%)	9 (15.8%)	2 (2.8%)
Behavioral Management n=57	4 (7.0%)	**25 (43.9%)**	15 (26.3%)	12 (21.1%)	1 (1.8%)
Collaboration n=57	11 (19.3)	**33 (57.9%)**	10 (17.5%)	2 (3.5%)	1 (1.8%)
Support Services n=57	3 (5.3%)	**27 (47.4%)**	13 (22.8%)	12 (21.1%)	2 (3.5%)

Note: Frequencies and percents underlined and bolded indicate the mode.

assistance in a variety of special needs related situations because they had learned enough about special education related services and supplementary aids and services (e.g., occupational therapy, physical therapy, adaptive physical education, assistive technology, etc) available.

Table 4.4 outlines survey participant responses. As illustrated, one can conclude that respondents agreed, overall, that teacher program completers at their respective universities were satisfactorily prepared to teach students with disabilities included in the general education setting.

Research Question 7: *Do faculty in elementary education preservice preparation programs at IHE's in the United States believe that it is reasonable to require elementary education teacher candidates to acquire all preferred competencies recommended by INTASC and NJCLD?* Survey questions 11 and 12 provided data to answer this question. Question 11 asked for a "yes" or "no" response and question 12 asked for the response rationale. Fifty-eight (80%) responses were received. Forty-four (75.9%) agreed and 14 (24.1%) did not agree that this is a reasonable requirement. Three faculty respondents who indicated "no," voiced concern about asking too much in a program already so demanding. Another three individuals felt that awareness of these skills is okay, but beyond that requires hands-on experience while teaching. One person voiced the need to learn about collaboration so that teachers can work with special educators to meet needs of students with disabilities in general education settings. Another person remarked that requiring such skills would be more appropriate for students in dual general/special education programs and another addressed competencies that deal with teaching all students. Interestingly, six faculty who agreed that these skills should be acquired noted that program constraints make it unrealistic. Twenty-four respondents articulated the reality of students with disabilities now a part of general education classrooms and that general education

teachers must be prepared. A comprehensive list of responses along with their quoted rationale is in Appendix H.

Data Analysis: Questions 8 – 12

Research Question 8: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?* Running a loglinear analysis provides chi-square results that determine whether significant differences exist between two or more variables, providing whether an association between them is present. Then, specific relationships can pinpoint where differences occur among groups (Thompson, 2006). The limitation is that the frequency associated with each cell must be greater than one and only 20% of the cells may contain a frequency less than five. This test for independence of variables cannot be done without the power of adequate cell frequencies. The cell sizes in this study were insufficient and thus, the researcher was unable to complete the analysis in spite of combining variables. As a result, the data collected were statistically inconclusive.

Individual variable frequency counts are reported under *Research Question 4* (pp. 103, 104) and *Research Question 6* (pp. 106 - 108).

Research Question 9: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and the faculty members' beliefs that students from their elementary general education teacher preparation programs are trained well enough to foster meaningful educational opportunities for students with disabilities in general education classrooms?* A statistical conclusion about results from these data cannot be stated. There was

not enough variability in responses for either variable to conduct a test for independence. The sizes of cell frequencies were too small, reducing the power to detect an association, hence the power to make a correct interpretation of the effect. In this case, the study sought to determine an association between the level to which knowledge and skills are *assessed* and faculty beliefs that preservice teachers from their institution are trained well enough to foster meaningful classroom experiences for students with disabilities. In 119 chi square calculations, a range from 86.7% to 100% inadequate cell size per analysis was noted. This fact eliminated the opportunity to run statistical analyses. Individual variable values are reported under *Research Question 5* (pp. 105, 106) and *Research Question 6* (pp. 106 - 108).

Research Question 10: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is taught and whether special education trained faculty teach preservice teachers about special education related issues?* Fifty-seven (91.9%) respondents indicated that special education related knowledge and skills are taught by faculty with training in special education and five (8%) did not. Two (2.8%) of the respondents marked "not applicable" since there is no special education requirement in their elementary general education teacher training programs. Frequency counts were too low to apply statistical analyses to the descriptive data, therefore, the researcher used frequencies and percents to articulate the inquiry results.

Research Question 11: *Is there a relationship between the level (based on Bloom's Taxonomy) that each skill is assessed and whether special education trained faculty teach preservice teachers about special education related issues?* Again, as determined with the previous question, frequency counts were too low to apply statistical analyses to the descriptive data.

Research Question 12: *Is there a relationship between the level (based on Bloom's*

Taxonomy) that each skill is taught and whether the university has a special education degree program? In this particular instance, every respondent (N=72) answered the question. Seventy faculty indicated that their university has a special education degree program; two noted the absence of such a program. In order to do a statistical analysis on the data, there must be enough variability in response options to make inferences that will generalize to the population representing sampled responses. The appropriate statistical test of independence according to these data requires at least 5 counts per cell. Because only two respondents indicated that their university does not have a special education degree program, the proposed statistical analyses are contraindicated. The researcher considered correlation statistics as well. Pearson r could not be used since data are ordinal and mathematical computations used with interval and ratio data are required to determine this correlation. Non-parametric correlation such as the Spearman Rho is appropriate for ordinal data; however, the researcher did not believe the two faculty respondents from the universities that did not have a special education program were representative of like universities so determined the reporting of such a correlation to be misleading. Furthermore, the researcher is confident, with the limited number of responses, that frequency data reported provide the best indication of preservice elementary general education programs characteristics with regard to these questions.

Research Question 13: *Is there a relationship between the levels (based on Bloom's Taxonomy) that each skill is assessed and whether the university has a special education degree program?* There is insufficient variability in responses (70 respondents indicated a special education degree program while two did not) to assess the degree to which it co-varies with other variables (i.e., assessing knowledge and skills at different levels of Bloom's Taxonomy).

CHAPTER 5 - Discussion and Recommendations

Introduction

Since the passing of civil rights laws that pertain to educational rights of individuals with disabilities, students with disabilities are becoming increasingly present in general education classrooms (Kauffman, 1999; Kirk, Gallagher, & Anastasiow, 2000; Kober, Jennings, Rentner, Brand, & Cohen, 2001; Singh, 2006). The IDEA and NCLB policies have expanded the roles and responsibilities of classroom teachers. Even though the LRE provision of IDEA does not mandate that all students with disabilities, regardless of the nature and severity of their limitations, be placed in the general classroom (Kauffman, 1999, Kirk, Gallagher, & Anastasiow, 2000), these students must progress through the general curriculum and take the same state standards assessments as their non-disabled peers (with the exception of a few, less than 1% in some states) and thus, they are in general classrooms more often than not. "All teacher candidates can expect they will have the opportunity to work with students with special needs" (Nelson, 2006, p.486), so they must come into the classroom prepared to teach them.

With the change in classroom demographics, accountability systems, and the current push to include students with disabilities in general education classrooms, it is critical that teacher education training programs in our IHEs prepare teachers accordingly. An objective of the "Highly Qualified Teacher" clause in NCLB (2002) is to ensure that "all students…have the best teachers possible. A well-prepared teacher is vitally important to a child's education" (Essex, 2006. pp. 61, 62). Interestingly, NCLB allows states to establish their own certification requirements, giving way to the major inconsistencies in teacher training.

The primary focus of this study was to explore and describe the nature and extent of elementary preservice teacher training that pertains to students with disabilities who receive part

or all of their education in the general classroom; *What is being taught in elementary education preservice training programs that will prepare general education teacher candidates to teach students with disabilities who are in regular classrooms?* Survey data representing approximately 15,075 new teachers across the United States were used to describe how teacher education programs prepare general education teacher candidates for the shared responsibility of teaching students with disabilities.

Conclusions and Discussion

The data collected from this study provided valuable information, albeit some statistical analyses were not practical as they could lead to misinterpretation of the data. Through the survey and literature relevant to this study, the researcher concluded that not all new teachers are equally trained/qualified for a number of reasons:

1. Each state develops its own policies and standards for teacher preparation program development and approval (U.S. Department of Education, Office of Postsecondary Education, 2006).
2. Requirements for special education content in general education teacher training programs differ among states. Specifically, according to this study, 13 (25.5%) state departments require that elementary education teacher candidates seeking initial licensure take a specific course related to students with disabilities. Another 26 (51.0%) have content standards that include such knowledge and 7 (13.7%) have no special education requirements. Data were unavailable for five states.
3. According to Title II State Reports (2009) and responses from study participants, standards vary in number and in substance among states that have them for general education teacher licensure.

4. As well as differences in standards, the way in which special education content is "delivered" differs. Some universities infuse the content into existing general education courses while others teach it in *one or more* special education classes designed specifically for that purpose. Special education content is offered as elective classes at some universities where there are differences in content learned among program completers within the same program. There are also universities who deliver special education content to preservice elementary general educators through different combinations of the above.
5. Which skills are taught and the depth to which they are taught also varies. In some IHEs for example, faculty are teaching students to a level that allows them to apply, analyze and evaluate the content. Other programs expect elementary teacher candidates to merely remember it. Five of the skill areas from this study reported ranges from not teaching a given skill to teaching it to the highest level of Bloom's Taxonomy.
7. Standardized testing for teacher licensure is a criterion only in some states. According to the Secretary's Sixth Annual Report on Teacher Quality from the academic year 2004-2005, 43 states and the District of Columbia require licensure exams and seven do not.
8. Exams that states require for licensure differ. Tests available include (a) basic skills; (b) professional knowledge; (c) academic content and pedagogy (e.g., mathematics, social studies, science, the arts); (d) other content areas (e.g., agriculture, marketing, computer science); (e) teaching special populations (e.g., special education, English as a second language); and (f) performance

assessments. Of the 43 states and the District of Columbia requiring exams, only 30 require general education teacher candidates to take a test that pertains to teaching special populations (U.S. Department of Education, Office of Postsecondary Education, 2006).

9. Regarding assessment for certification or licensure, "each state has the authority to determine the minimum passing score on all assessments required for certification or licensure" (Secretary's Sixth Annual Report on Teacher Quality, 2006, pp. 26, 27). The minimum passing score is generally set at or below the median national score (U.S. Department of Education, Office of Postsecondary Education, 2006).
10. The level of practical experience among new teachers is not consistent. Some states require elementary education candidates to have a student teaching experience where they assume the "duties of a full-time classroom teacher under the direct supervision of an experienced mentor teacher" (Secretary's Sixth Annual Report on Teacher Quality, 2006, p. 40) ranging from 5 – 20 weeks. One institution surveyed for the current study required "a clinical experience with students with disabilities as well as additional coursework in special education."

Clearly, differences in special education requirements for elementary general education teacher program completion among individual universities and disparities in state criteria for initial elementary general education teacher licensure exist.

Federal regulations under NCLB 2001 require that each teacher be "highly qualified." This clause however, granted power to each state to develop their own outcome standards and criteria for acceptable acquisition of these outcomes by teacher program completers. What

resulted was development of different expectations of teacher candidates among states and consequently, dissimilarities in what is being taught in university teacher preparation programs across the country.

Although the sample in the current study is small, it represents training of over 15,000 candidates nationwide. Strictly regarding the level at which knowledge and skills related to teaching students with special needs are taught in elementary general education teacher training programs, there were major contrasts. In some programs given skills were not taught nor assessed and the same skills at various other universities were taught and assessed at all levels across Bloom's taxonomy. Furthermore and importantly, when faculty were asked if they agreed (agreed or strongly agreed), were unsure, or disagreed (disagreed or strongly disagreed) that students in their elementary education teacher training programs were trained well enough to be able to apply given skills consistently, correctly and/or with confidence while teaching, 42.1% - 77.2% agreed. Curiously, again existing among ***all*** respondents was a full or nearly full (=>4) range of levels to which their students were prepared and assessed. Some universities, for example, considered a skill taught to the "remembering" level adequate, while others considered it inadequate. Some considered the "analyzing" level to be adequate while others considered it inadequate, and so forth. Additionally, 15.5% – 33.3% of faculty were not even sure whether their teacher program completers were adequately prepared or not, which raises this question: Are federal, state, and district education agencies, and teachers and university faculty able to define the current general education teacher's role in a way that is clear enough so that new teachers can be prepared and subsequently teach accordingly? Perhaps differences in responses are partially associated with lack of a clear and consistent definition of current general educator roles as well as what constitutes "adequate training."

Inconsistencies in special education requirements for general education teachers need to be examined further. In all phases of education, teachers and students have entered an era of strict accountability and accountability means assessment, which to a great extent, drives what we teach. All assessment is not equal which adds up to unequal training. Some teachers have had better training than others, yet, all new teachers entering classrooms are expected to provide meaningful learning experiences that promote success for *all* students including those with disabilities. It is possible that a new teacher, in a state that has no special education requirements (i.e., courses or outcome standards) for initial certification, who also graduated from a university with no additional special education requirements, can teach in a classroom where students with disabilities spend part or all of their school day. Take into consideration students with disabilities across the country. What happens in classrooms when new teachers are faced with tasks for which they need particular knowledge or skills? Some have acquired needed skills in their preservice training and others haven't. What might the consequences be for students with disabilities who are learning from these very differently prepared teachers? Do these students have equal "chances" to learn?

Presently, the Federal government is working on the new reauthorization of NCLB 2001. Proposed is a system of tracking student achievement that includes identifying the location of the teacher's career preparation. This system would have critical implications for teacher education programs since they would be partially accountable for teacher performance that includes successfully sharing the responsibility for educating students with disabilities. All teachers, not just some in some states, will be accountable. All universities will be accountable. The researcher contends that perhaps it is time to look at establishing a set of national competency standards for general education teacher licensure or certification.

Support for national teacher competencies can be coupled with the fact that every student who has an active IEP has the same legally protected educational rights under the federal IDEA laws. Policies regulate how their education will be delivered, how plans for their education will be devised, and how these plans will be implemented and evaluated. Unlike the school curricula, through which all students are expected to progress and where individual states have been granted authority to develop their own programs in response to federal policies and regulations, every student with an IEP is educated under the *same* federal mandates and regulations regardless of the state in which they reside. We cannot dismiss the fact that nationwide policy and regulation mandates control their education nor can we forget that a total of 95.8% of children with disabilities spend some time in a general education classroom (U.S. Department of Education Office of Special Education Programs, 2003). Almost 78% of these children spend between *20 and 100 percent* of their school time in general education classrooms (U.S. Department of Education, Office of Special Education Programs, Data Analysis System [DANS], OMB, 2003, p. 180).

In view of such policies and regulations, every teacher who works with these students needs to know what the policies and regulations are and how to implement them, as mandated by law, in the general education setting. General educators who share in teaching students with disabilities are also accountable for their progress through the general curriculum standards, and must know how to work with them. It is the responsibility of state teacher licensing agencies to make sure that new teachers possess such skills before being issued a certificate or license to teach.

Satisfactory performance on standardized assessments has become a primary tool used to grant teacher licensure. The National Council for Accreditation of Teacher Education's

(NCATE) Spring 2010 newsletter included an article, *Taking Assessment to the Next Level: Incorporating New Types of Data-Driven Assessment in Preparation Programs.* Author and president of NCATE, James G. Cibulka, quoted a comment made by Linda Tyler (2010) from a study conducted by the National Comprehensive Center on Teacher Quality and Public Agenda (2008), "the vast majority of teacher evaluation tools have not been demonstrated to measure what consistently leads to student learning" (Tyler in Cibulka 2010, p. 1). The study investigated whether training that pertains to child and adolescent development, diversity and special needs, and ethnic differences occurred in teacher preparation programs and whether new teachers who had the training thought it helped. Most teachers surveyed said they had had training, but go on to say that the training did not help them much. Specifically with regard to special education, 82% of teachers said they were trained to work with students with disabilities but in practice, only 47% said their training "helped a lot." The gaps that exist between training and practice are not only due to curricula but often to the lack of clinical experiences with which to apply such knowledge.

Participants in the current study also noted the need to apply skills, however, they approached it from the perspective that the opportunity to practice and apply skills would come "on the job" due to the nature and constraints of current teacher training programs. When asked whether it was reasonable to acquire all of the 12 knowledge and skills areas referred to throughout the survey, several respondents commented on the need to apply them:

- "Yes-I think they can all be introduced, but it will take experience in the classroom for true understanding and application--including analyzing and evaluating and creating."
- "No-Because it requires application and there is not the context to do that even in

student teaching".

- "No-There is so much to learn as part of a preservice teaher. I think general educators should be made aware of these concepts but I do not think they would be able to apply the skills of such things as IEP process and assessment, support services and community services (even special education majors have trouble remembering them). Awarness is reasonable"
- "No-Pre-service teachers need real classroom experiences to develop these skills. Fresh graduates, no matter how much field experiences they've had, do not have the real life experiences to fully develop these skills."
- "No-despite a required class in special education and integrated special education content in many elementary courses, the majority of our students still feel unprepared to work with students with disabilities in the classroom. I think they gain that confidence with hands-on experiences in the classroom, not through more book learning."

Recognized by several individuals in the field and NCATE, training needs to encompass more opportunity for application. NCATE and others interested in changing assessment for licensing new teacher candidates are looking forward to developing "reliable measures of effective practices" (p. 4) and learning even more about elements of effective teaching through new teacher candidate qualification measures. "We will build on solid research and create tools that accurately distinguish teaching that leads to student success from teaching that does not" (Tyler, 2010, p. 1). We cannot dismiss the fact that assessment drives teaching and practice (Hannah & Dettmer, 2003) and thus, if major changes in program and licensure assessment occur then teacher training programs will also change. "The NCATE process and

standards will ensure that institutions use that information to change their programs" (Cibulka, p.4). As Cibulka (2010) states, teacher education programs must maximize teacher candidates' opportunities to practice new teaching skills, giving them clinical experiences that allow them enough time in classrooms to "affect student learning in a meaningful way" (p. 2). Reflecting on NCATE's stance and the opinion of faculty in the current study, there is support for a more universal level to which skills are taught and assessed in teacher preparation programs across the United States. Also implied is that adequate knowledge and skills would require higher level thinking skills rendering teachers capable of effective teaching that leads to student success. To what level must *all* teacher candidates be accountable?

There are other issues with inconsistencies in preservice general education teacher requirements that pertain to educating students with disabilities and more research is necessary. Some studies connect the lack of confidence and teachers' negative attitudes regarding the integration of students with disabilities to inadequate training (Brown, Welsh, Hill, & Cipko, 2008; Chester & Beaudin, 1996; Henning and Crane, 2002; Jung, 2007; Lambert, Curran, Prigge and Shore, 2005; Silverman, 2007). Research is needed to provide information about the number of former teachers who have left the field for reasons linked to students with disabilities, whether lack of training to work with these students had a direct or indirect effect on decisions, and how prominent training factors were in decisions to "leave the classroom."

Studies similar to the current study, instead focusing on new teacher response rather than the much needed opinions of faculty at representative universities are needed to further inform the field as it pertains to preservice education. Would teachers new to the field share the same perceptions as university faculty? Much of the teacher training lies in the hands of the IHE teacher preparation programs. There is a need to understand university ***and*** new teacher

perceptions about levels to which skills are taught and subsequently, the adequacy of this level of training. Then federal, state, and district policy makers and teachers and faculty must work as informed collaborative teams to make new decisions regarding teacher roles, teacher preparation, teacher licensing criteria, and continued accountability for student success in the context of today's classrooms.

Study Limitations

The most serious potential limitation of this study pertained to truthfulness, however the researcher is assuming that participant response was honest and accurate. Since only institutions in the United States that graduate the largest number of elementary education program completers were surveyed, the studies generalization is limited. The study sample was small with the final response rate of 72 (47%). Moreover, responses to some of the demographic data, whether the IHE had a special education degree program and whether special education trained faculty were teaching special education requirements were overwhelmingly one sided. As a result, the researcher was not able to run comparative and correlational statistics.

Summary

Special education requirements for teacher training program completion and initial teacher certification or licensure differ significantly across the United States. Differences also exist in the level to which preferred knowledge for teaching students with disabilities in general education classrooms are taught and the level at which students are held accountable by assessment. The way content and skills are taught and the amount of time spent by IHE's to teach such content varies. The range of how this knowledge is taught ranges from not taught at

all to electives to content infused into existing courses to specific classes and clinical experiences.

Importantly, faculty do not agree on whether training is adequate enough to enable new teachers to enter the classroom with skills necessary to provide meaningful learning experiences for their students with special needs, partially perhaps, because "adequate preparation" needs to be defined. There was a broad range of levels to which skills were taught and assessed from faculty who agreed and disagreed that program completers had sufficient training to insure meaningful learning experiences for students with special needs. It is important that universities and teacher licensing agencies throughout the country stand on common ground with regard to "adequate preparation" and that their opinions are based on teacher success and positive K-12 student progress. In addition to descriptive data, the current study attempted to investigate comparisons in levels at which students in elementary general education teacher preparation programs are taught preferred knowledge and skills and whether these levels impact faculty agreeance that their programs provide adequate preparation. The sample size was too small to apply the appropriate statistical methods. Such research is needed, however, to contribute to a better understanding of faculty perspectives on the depth of knowledge they deem necessary to insure success among students beginning teachers teach in their own classrooms. The perspective faculty hold must be viewed in the context of federal education law and the needs of states and school districts throughout the country. Then, program adjustments can be made that will create an alignment between government, universities, and K–12 schools that will insure the successful mission of educating *all* of our youth. A study similar to this one with new teachers being the study unit would give researchers an opportunity to compare the perceptions of faculty and those of new teachers who can base their responses on current, authentic

classroom experiences. Before entering the classroom every new general education teacher in the United States needs to be competent in a group of core skills that pertain to teaching students with disabilities. This group of core skills should be determined by Federal policies and regulations and by new teacher experiences and faculty recommendations. On the other hand, perhaps it is time to redefine teacher roles and the concept of Least Restrictive Environment.

Implications and Recommendations

The results of this study are useful for teacher preparation programs, teacher licensing agencies and education policy makers. Faculty working on teacher preparation program changes can use this data to inform their decisions and identify knowledge and skill areas that need more attention. The awareness that this study creates will give faculty a starting point from which to begin thinking about their current teacher preparation program and the direction to consider with regard to developing a program that fits within the context of today's classrooms.

The findings in this study highlight the need for future research. First, similar but much larger studies like this one with both elementary and secondary teacher preparation will provide a snapshot of the "bigger picture" regarding how teachers are prepared. Second, studies need to investigate barriers that prevent some preservice teacher preparation programs from teaching skills needed by general education teachers in the context of inclusive classrooms that share the responsibility of educating students with disabilities. Third, research is needed to investigate the perceptions of in-service teachers regarding their preparation to work with students with disabilities who are in their classrooms. Findings can be compared to faculty perceptions that will inform collaborative efforts between university teacher training faculty and in-service teachers in an effort to reform teacher preparation across the country. Findings can also inform state licensing agencies and Federal, state and local education policy makers who set

teacher expectations and criteria for teacher qualifications. Finally, discussion and research is needed to create a unified set of special education knowledge and skill competencies for general educators so that every teacher in the United States is equally and adequately prepared to teach students with disabilities who are educated in general education classrooms.

The researcher hopes that this study will contribute to open discussions among policy makers, accreditation agencies, teacher licensing agencies, teacher trainers, and new elementary general education teachers about core skill competencies pertaining to students with disabilities who are included in general education settings that every teacher candidate in the United States should have before entering their own classrooms.

References

Alliance for Excellent Education. (2005). Teacher attrition: A costly loss to the nation. Alliance for Excellent Teaching, Washington D.C. Retrieved from http://www.all4ed.org/files/archive/publications/TeacherAttrition.pdf

Alliance for Excellent Education. (2008). What keeps good teachers in the classroom? Understanding and reducing teacher turnover (Issue Brief), Washington D.C. Retrieved from http://www.all4ed.org/files/TeachTurn.pdf

American Association of State Colleges and Universities (1999). A call for teacher education reform: A report of the AASCU Task Force on Teacher Education. *American Association of State Colleges and Universities*. Washington DC, 1-16.

Artiles, A. J. (2003). Special education's changing identity. In L.I. Katzman, A. G. Gandhi, W. S. Harbour, & J. D. Larock, (Eds.). Special education for a new century (pp. 164-202). Cambridge, MA: Harvard Educational Review.

Avramidis, E. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. Teaching and Teacher Education, 16(3), 277.

Avramidis, E. & Norwich, B. (2002). Mainstream teachers' attitudes towards inclusion/integration: a review of the literature. *European Journal of Special Needs Education*, 17(2), 1-19.

Avramidis, E. Bayliss, P. & Burden, R. (2000a). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education,* 16(3), 277-293.

Brown, K. S., Welsh, L. A., Hill, K. H., & Cipko, J. P. (2008). The efficacy of embedding special education instruction in teacher preparation programs in the United States.

Teaching and Teacher Education, 24(8), 2087-2094.

Buck Vs. Bell, Supreme Court Decision, (1927) American Philosophical Society, ERO, MSC77,SerX,Box3: Harry H. Laughlin. Retrieved from http://www.eugenicsarchive.org/html/eugenics/static/images/260.html

Burke, K., & Sutherland, C. (2004). Attitudes toward inclusion: Knowledge vs. experience. *Education, 125*(2), 163-172. Retrieved from Research Library database.

Chester, M. D., & Beaudin, B. Q. (1996). Efficacy beliefs of newly hired teachers in urban schools. *American Educational Research Journal, 33(1),* 233-257.

Cibulka, J.G. (2010). Taking assessment to the next level: Incorporating new types of data-driven assessment in preparation programs. *The Newsletter of the National Council for Accreditation of Teacher Education, 19(2),* 1-8.

Council of State School Officers (2007). Interstate New Teacher Assessment and Support Consortium (INTASC). Retrieved from http://www.ccsso.org/Projects/interstate_new_teacher_assessment_and_support_consortium

D'Alanzo, B. J., Giordano, G., & Cross, T. L. (1996). Improving teachers' attitudes through teacher education toward the inclusion of students with disabilities into their classroom. *The Teacher Educator, 31*, 304-312.

Data Accountability Center, (2004, 2007). Individuals with disabilities education act (IDEA) data: Part B data and notes. Retrieved from https://www.ideadata.org/PartBData.asp

Davies, S. P. (1959). *The mentally retarded in society* (pp. 20-121). New York: Columbia University Press.

DeStefano, L., & Snauwaert, D. (1989). A value critical approach to transition policy analysis.

Champagne, IL: University of Illinois, Secondary Transition Intervention Effectiveness Institute.

Deshler, D. (2008, June). oStrategies for educational improvement: NCLB 2008 and beyond. University of Kansas School of Education, the Kansas State Department of Education, and the Ewing Marion Kauffman foundation. Conference conducted at the University of Kansas, Lawrence Kansas.

Egnor, D. (2003). IDEA reauthorization and the student discipline controversy. Denver, CO: Love Publishing Company.

Essex, N. L. (2006). *What every teacher should know about no child left behind*. Boston, MA: Pearson Allyn and Bacon.

Friend, M. (2008). Key concepts for understanding special education. In *Special education: Contemporary perspectives for school professionals (2nd ed.)*(pp. 1-32). Boston, MA: Allyn and Bacon.

Ganschow, L., Weber, D. and Davis, M. (1985) Preservice teacher preparation for mainstreaming.. *Exceptional Children, 51*, pp. 74-76.

Guetzloe, E. (1999). Inclusion: The broken promise. *Preventing School Failure, 43*(3), 92-98.

Hadadian , A., & Chiang, L. (2007). Special education training and preseervice teachers. *International Journal of Special Education. 22(1).* Retrieved from http://www.internationaljournalofspecialeducation.com/articles.cfm?y=2007&v=22&n=1

Hannah, G.S. & Dettmer, P. A. (2003). *Assessment for effective teaching: Using context-adaptive planning* (pp. 1-43). Boston, MA: Allyn and Bacon.

Harris, C.R., Kaff, M.S., Anderson, M.J., & Knackendoffel, E.A. (2007). Designing Flexible Instruction. *Principal Leadership*, 7(9), 31-35.

Henning, M. B., & Mitchell, L. C. (2002). Preparing for inclusion. *Child Study Journal, 32*(1), 19-29.

Hewett, F. (1974). *Education of exceptional learners* (pp. 1-38). Boston, MA: Allyn and Bacon.

Hitchcock, C., Meyer, A., Rose, D. H., & Jackson, R. (2002, 2009). *Technical brief: Access, participation, and progress in the general curriculum*. Retrieved from http://www.cast.org/publications/ncac/ncac_techbrief.html

Hitchcock, C., & Stahl, S. (2003). Universal design for learning: Improved learning opportunities. *Journal of Special Education,* 18(4), 45-52.

Horne, R. (1991). The education of children and youth and children with special needs: What do the laws say? *NICHY News Digest*, 1(1) 2-17. 1991 Retrieved from http://www.nichy.org/pubs/outprint/nd15txt.htm#edforall

Hu, M. (2001). Preparing preservice special education teachers for transition services: A nationwide web survey. (Unpublished doctoral dissertation). Kansas State University, Manhattan, KS.

IDEA Assistance to States for the Education of Children With Disabilities, 34 C.F.R. §300 (1999).

IDEA (Section 1412 (a) (5), IDEA 2004).

IDEA Assistance to States for the Education of Children With Disabilities, 34 C.F.R. §300.24(a) (2005).

Improving the Academic Achievement of the Disadvantaged Final Rule, 34 C.F.R. § 200 (2003).

Ingersol, R. (2003). *Is there really a teacher shortage?*. Seattle, WA: Center for the Study of Teaching and Policy. Retrieved from http://www.gse.upenn.edu/faculty_research/Shortage-RMI-09-2003.pdf.

Interstate New Teacher Assessment and Support Consortium (2001, May). *Model Standards for Licensing General and Special Education Teachers of Students with Disabilities: A Resource for State Dialogue*. Washington, DC: Council of Chief State School Officers.

Jung, W. S. (2007). Preservice teacher training for successful inclusion. *Education 128*(1), 106-113.

Kauffman, J. M. (1999). Commentary: Today's special education and its messages for tomorrow. *The Journal of Special Education, 32*(4), 244. Retrieved from Research Library database.

Kirk, S. A., Gallagher, J. J., & Anastasiow, N. J. (2000). *Educating exceptional children* (9th ed.). New York: Houghton Mifflin.

Kirp, D. (1974). Student classification, public policy, and the courts. *Harvard Educational Review,* 44 (1) 7-52.

Kleinhammer-Tramill, J. (2003). An analysis of federal initiatives to prepare regular educators to serve students with disabilities: Deans' grants, REGI, and beyond. *Teacher Education and Special Education, 26*(3), 230.

Kleinhammer-Tramill, J., and Fiori, T.A. (2003). A history of federal support for preparing special educators and related services personnel to serve children and youth with disabilities. *Teacher Education and Special Education*, 26(3), 217-229.

Kober, N., Jennings, J., Rentner, D., Brand, B., & Cohen, G. (2001). *Twenty-five years of educating children with disabilities: The good news and the work ahead.* Washington DC: American Youth Policy Forum and Center on Education Policy. Retrieved from http://www.aypf.org/publications/special_ed.pdf

Lambert, C., Curran, C. M., Prigge, D. J., & Shorr, D. (2005). *Addressing inclusion in an era of*

education reform: Dispositions of secondary and elementary pre-service educators in the pipeline (online submission ED490026). Retrieved from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/be/dd.pdf

McLesky, J., & Waldron, N. (2002). Inclusion and school change: teacher perceptions regarding curricular and instructional adaptations. Teacher Education and Special Education, 25 (1), 41-54.

Minow, M. L. (2001). *Teacher training: recommendations for change.* Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved from http://www.cast.org/publications/ncac/ncac_teachertrain.html

Mock, D., & Kauffman, J. M. (2002). Preparing teachers for full inclusion: Is it possible? *Teacher Educator, 37*, 202–215

Murry, F.R., & Murry G. B. (2000). Using a lesson template to integrate general and special education: Teaching lesson template use to educators of students with special needs. Paper presented and the National Convention of the Association for Educational Communications and Technology, Denver, CO

Natalicio, D., & Pacheco, A. (2000). The future of teacher education: Two experts share their thoughts. *Edutopia.* Retrieved from http://www.edutopia.org/future-teacher-preparation National Center for Educational Statistics (2003).

National Information Center for Children and Youth With Special Needs, (1996). The education of children and youth with special needs: What do the laws say? *NICHY News Digest 15.* 1-16. Retrieved from http://www.nichy.org.informationResources/Documents/NICHY%20PUBS/nd15.pdf

National Joint Committee on Learning Disabilities, (1998). *Learning Disabilities: Preservice Preparation of General and Special Education Teachers.* Asha, 40 (Suppl. 18), in press.

National Joint Committee on Learning Disabilities, (2009). LDOnline partners: National Joint Committee on Learning Disabilities. Retrieved from http://www.ldonline.org/about/partners/njcld

Nelson, B. (2010). On your mark, get set, wait! Are our teacher candidates prepared to embed assistive technology in teaching and learning? *College Student Journal.* Retrieved from http://findarticles.com/p/articles/mi_mOFCR/is_3_40/ai_n26976639

No Child Left Behind Act of 2001, NCLB 9101, Title XI of Section 9101(23) (2002).

Nolet, V., & McLaughlin, M. J. (2000). *Accessing the general curriculum: Including students with disabilities in standards-based reform.* Thousand Oaks, CA: Corwin Press.

Overbaugh, R.C., & Schultz, L. (2009). Bloom's taxonomy. http://www.odu.edu/educ/roverbau/Blooms_taxonomy.htm

Reynolds, M.C., & Birch, J.W. (1977). *Teaching Exceptional children in all America's schools.* Reston, VA: the Council for Exceptional Children.

Rose, D. H. (2001). Universal design for learning. *Journal of Special Education, 16*(4), 64-67.

Schrenker, C. E. (1997). The history of teacher education at the University of Wisconsin 1896-1997. Superior, WI: University of Wisconsin-Superior.

Scruggs,T., & Mastropieri, M. A. (*1996*). Teacher perceptions of mainstreaming/inclusion 1958 1995: A research synthesis. *Exceptional Children, 63*, 59-74

Schumm, J. S., & Vaughn, S. (1992). Planning for mainstreamed special education students: Perceptions of general education teachers. *Exceptionality, 3*, 81-98.

Schumm, J. S., & Vaughn, S. (1995). Responsible inclusion for students with learning

disabilities. *Journal of Learning Disabilities, 28,* 264-270.

Shade, R. A., & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. *Preventing School Failure, 46*(1), 37-41.

Shaver, J. P., Curtis, C. K., Jesunathadas, J., & Strong, C. (1987, April). The methodology and outcomes of research on modifying attitudes toward persons with disabilities: A comprehensive, systematic review. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Singh, D. K. (2001). *Are general educators prepared to teach students with physical disabilities.* Paper presented at the Annual Convention for Council for Exceptional Children, Kansas City, MO.

Smith, D., Tyler, N., Skow, K., Stark, A., & Baca, L. (2003). Effective inclusion of students with disabilities in general education classrooms: The IRIS center for faculty enhancement. *Annual Meeting of the American Association of Colleges for Teacher Education,* New Orleans, LA.

Bierne-Smith, M., Patton, J., & Ittenbach, R.F. (2001). *Mental retardation.* Boston, MA: Prentice Hall.

Stanovich, P. J., & Jordan, A. (2002). Preparing general educators to teach in inclusive classrooms: Some food for thought. *The Teacher Educator, 37*(3), 173-185.

Stayton, V. D., & McCollum, J. (2002). Unifying general and special education: What does the research tell us? *Teacher Education and Special Education, 25*(3), 211-218.

Stodden, R.A., Galloway, L.M., Stodden, N.J. (2003). Secondary school curricula issues: Impact on postsecondary students with disabilities. *Exceptional Children*, 70, 9-24.

Thompson, S. J., Lazarus, S. S., Clapper, A. T., & Thurlow, M. I. (2006). Adequate yearly

progress of students with disabilities: Competencies for teachers. Teacher Education and Special Education, 29(2), 137-147.

Trump, G.E. and Hange, J.E. (1996). Teachers' perception of and strategies for inclusion: A regional summary of focus group interview. Washington DC: Appalachia Educational Lab.

Turnbull, R., Huerta, N., & Stowe, M. (2006). *Individuals with disabilities act amended in 2004*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Tyler, L. (2010). Measuring Teaching Effectiveness. Education Week, 29(19), 18,19. Retrieved from http://www.edweek.org/ew/articles/2010/01/27/19tyler.h29.html.

U.S. Department of Education, Office of Special Education Programs (1994).

U.S. Department of Education, Office of Special Education Programs, Data Analysis Program[DANS], OMB. (2003)

U.S. Department of Education, Office of Special Education Programs, Data Analysis Program[DANS], OMB. (2005). 27th annual report to congress on the implementation of the individuals with disabilities education act U.S. Department of Education.

U.S. Department of Education, Office of Post Secondary Education (2009). *The secretary's sixth annual report on teacher quality: A highly qualified teacher in every classroom.* Washington, DC.

U.S. Office of Special Education Programs (2001). General education teachers' role in special education. *SPeNSE Fact Sheet* Retrieved from http://ferdig.coe.ufl.edu/spense/gened11-29.pdf

Winzer, M. A. (1993). *The history of special education: From isolation to integration*. Washington D.C.: Galludet University Press.

Appendix A - Letter to State Administrators

Names of Three Universities – Message

information request

from
Mary Jo Anderson <mja6868@ksu.edu>
to
name@statedepartment.org
date
Mon, Apr 27, 2009 at 5:04 PM
subject
information request
mailed-by
gmail.com

Dear (Name of state administrator:

I am a doctoral student at Kansas State University in the process of identifying the three universities or colleges in each state that have the largest number of licensure eligible **elementary** education graduates each year and am wondering if you could help me with that. I have attached a letter that will explain in more detail. My major professor, Dr. Warren White and I would greatly appreciate any assistance you give that will help us to obtain the information we need.

Sincerely,

Mary Jo Anderson
369 Bluemont Hall
Kansas State University
Manhattan, KS 66506

Request Letter attached to the email message

Date

Dear (State Administrator):

Children with disabilities are becoming members of general education classrooms in increasing numbers and thus, teacher preparation has been identified as a critical factor in the successful schooling of these students. Little is known, however, about the respective training in preservice teacher education programs at institutions of higher education. In response, we are conducting a nationwide web survey to gain a clearer understanding of the type and extent of training preservice elementary education teachers receive pertaining to teaching the students in their classrooms who have disabilities.

To distribute our web survey we need your help. We need to know:

- the three universities in (name of state) that produce the largest number of licensure-eligible elementary education teacher graduates each year, an associated faculty person's name, and email contact information for that person.
- whether (name of state) has a special education requirement for initial elementary education licensure and if so, what that requirement is.

We would greatly appreciate your help in obtaining these facts. Please will you email us this information from your state? Our email addresses are mja6868@ksu.edu or wwhite@ ksu.edu.

Your assistance with this effort is greatly appreciated.

Sincerely,

Mary Jo Anderson
Doctoral Candidate
Department of Special Education, Counseling and Student Affairs
Kansas State University

Warren J. White
Professor of Special Education
Chairperson of Special Education
Director of Assessment
Kansas State University

https://mail.google.com/mail/?shva=1#search/letter+to+state+administrators/120e99bf3a6e65c5

Appendix B - Letters to Pilot A Participants

Email survey link for survey review

From **Mary Jo Anderson** <mja6868@ksu.edu>
To (email addresses of Pilot A participants)
Date Mon, May 4, 2009 at 12:07 PM
Subject survey link for survey review
mailed-by gmail.com

Hi Everyone!

Here are links for my survey. I am getting ready to send to a pilot group of Elementary General Education Department Heads/ Chairs/Program Coordinators in some of the smaller programs in the state. Before I do, though, I want to make sure it makes sense to all of you and it's as "polished" as I can make it. Then, by sending it out to department heads in smaller programs (not part of my sample), I can find out if there are any difficult, confusing, etc. questions coming from their perspectives. I have also attached a list of guiding questions to think about while you are going through the surveys and my research questions. Thank you very much for your help with this. I respect your expertise and appreciate your opinions.

I've left the settings so you can enter the survey more than once from your computer. You will also be able to go back through previous pages. In the final survey, I will set the options to only one response per computer and there will not be an option to go back through (unless you have other thoughts).

No, allow only one response per computer.

Yes, allow multiple responses per computer -- Recommended for kiosks or computer labs.

Yes, respondents can re-enter the survey at any time to update their responses

No, once a page in the survey is submitted, respondents cannot go back and change existing responses

Yes, respondents can go back to previous pages in the survey and update existing responses until the survey is finished or until they have exited the survey. After the survey is finished, the respondent will not be able to re-enter the survey.

Form A (begin with this one)
https://www.surveymonkey.com/s.aspx?sm=qkL_2fV1rph3q9pAN_2f_2bCWeyA_3d_3d
Form B https://www.surveymonkey.com/s.aspx?sm=_2f1mJZCrx6wmpKzomVXWhjg_3d_3d
I am on my way over to "The Department" to drop off hard copies
THANK YOU!
Mary Jo

Hard copy letters given to colleagues, Pilot Group A

Date

Hi (name of faculty colleague),

Here is a copy of the surveys, Form A and Form B. I noticed that the layout is different on the copies than on the web survey. **:o(** I will send you an email with a web link so that you can access my survey online. If you want to complete it to get a feel for how it works, I have it set up so it is completely anonymous. I want to be sure that option is working correctly, too. I will also attach (to an email) a list of my research questions and some guiding questions from Dillman. Thank you so much for agreeing to help me with this as I "plod" through the process. I'm really not minding it but will be glad to be finished.

Name, Name, Name and Name will also be critiquing my survey. If you want to make any comments to them while going through it, please feel free. I will be back at KSU sometime during the week and again in June. I am assuming that I will have to wait until the Fall to distribute the web packets to participants but have planned to send the final revision out to a number of department heads from smaller universities in Kansas. That will be the second part of my survey pilot. If you want me to meet with you I will be happy to and will let you know when I'll be in Manhattan. I will also prepare some self-addressed envelopes and stamps in case you want to send the survey or comments back to me that way.

If you have any questions, please let me know. I have two local cell numbers so I can be reached easily from any phone on campus.

Thank-you so much!

Mary Jo

Phone number: (xxx-xxx-xxxx)

Phone number: (xxx-xxx-xxxx

Appendix C - Letters to Pilot B Participants

Email pilot study (survey for dissertation)

from **Mary Jo Anderson** <mja6868@ksu.edu>
to professor@university.edu
date Wed, Sep 2, 2009 at 9:50 PM
subject pilot study (survey for dissertation)
mailed-by gmail.com

Dear Dr. (Name of Faculty Member):

I am a doctoral candidate at Kansas State University in Manhattan. Dr. Warren White is my Major Professor. My study involves a survey that I constructed and we are soliciting help from individuals such as yourself, who have research experience and expertise. We've attached a letter that includes a brief explanation and a request for your help. We would be very grateful to you for your participation in this pilot study.

Sincerely,

Mary Jo Anderson, Doctoral Candidate
Dr. Warren White, Major Professor
Special Education, Counseling, and Student Affairs
339 Bluemont Hall
Kansas State University
Manhattan, KS 66506

https://mail.google.com/mail/?shva=1#search/Skaggs/1237dcfa36d2a7a1

Letter for Pilot Group B sent through United States Postal Service

August 7, 2009
Dr. (name of Pilot B participant)
(Name of) University
(Street Address)
(City, State and Zip code)

Dear Dr. (name of pilot study participant),

I am preparing a survey as part of my doctoral dissertation study that will be completed by general education faculty at the three universities in each state that produce the greatest number of licensure eligible elementary education program completers. My survey will go first to department chairs and then, if necessary, to a department faculty member at the recommendation/request of the department chair.

Presently, I am conducting a pilot survey of university faculty with positions comparable to those held by research participants in order to get the opinion from individuals sharing a similar working context. The purpose of the pilot study is to help identify any language, procedural, appearance, or other survey characteristic that needs clarification or revision as well as any other characteristics that compromise the survey's validity and/or reliability.

Will you participate in the pilot study of this research by completing a web survey? I will send a hard copy to you via US postal service and a link that will give you web access. I would be very grateful to have your professional input in this process.

If you choose to participate, after critiquing/completing the survey you may want to share your comments and suggestions via email or discuss them during a telephone conversation with me. The survey has several questions that require a short answer. Comments regarding any of the questions may be entered in those spaces if you prefer. I will also prepare and send a self-addressed, stamped envelope in case you want to send the survey or comments back to me via U.S. mail and would also be happy to set up an appointment to speak to you personally. Please let me know if you have any questions.
Sincerely,

Mary Jo Anderson, Doctoral Candidate
Department of Special Education, Counseling and Student Affairs
369 Bluemont Hall, Kansas State University
Manhattan, KS 66506
mja6868@ksu.edu
xxx-xxx-xxxx

Appendix D - Letters to Survey Sample

Email Prenotice: doctoral research participation request

from
Mary Jo Anderson <mja6868@ksu.edu>
to
faultymember@university.edu
date
Tue, Nov 10, 2009 at 5:54 PM
subject
doctoral research participation request
mailed-by
gmail.com

Dear (Name of Faculty Member):

In a few days you will receive an email request to fill out a questionnaire on the web for an important research project being conducted at Kansas State University by Dr. Warren White, and doctoral candidate, Mary Jo Anderson. The investigation concerns the preparation of general elementary education teachers with regard to students with disabilities in general education classrooms.

I am writing in advance because I realize that many people like to know ahead of time that they will be contacted. Thank you for your time and consideration. It is only with generous individuals like you that our research can be successful. Your assistance in this effort is greatly appreciated.

Sincerely,

Mary Jo Anderson
Doctoral Candidate
Department of Special Education, Counseling, and Student Affairs
Kansas State University
Manhattan, KS 66506

Warren J. White
Department of Special Education, Counseling, and Student Affairs
Professor of Special Education
Chairperson of Special Education
Director of Assessment
Kansas State University
Manhattan, KS 66506

https://mail.google.com/mail/?shva=1#label/sent+prenotice/124e04e512a950a5

Email: survey link-dissertation study

From	**Mary Jo Anderson** <mja6868@ksu
to	person@university.edu
date	Mon, Nov 9, 2009 at 10:57 AM
subject	survey link-dissertation study
mailed-by	gmail.com

11/9/09

Chair, Department of Education
Building and Room Number
Name of University
University Address
City, State xxxxx

Dear Dr. Name:

My name is Mary Jo Anderson. I am a doctoral student at Kansas State University. My Major Professor, Dr. Warren J. White, and I invited you to participate in my dissertation research project to study the characteristics of general education teacher training programs across the United States with regard to preparing general education teacher candidates to work with students with disabilities.

You may access the survey by *clicking here*. A cover letter providing a brief description of the study and an explanation of confidentiality appears on the first page of the survey.

Thank you very much for helping us with this study. Your assistance in this effort is greatly appreciated.

Sincerely,

Mary Jo Anderson, Doctoral Candidate
Warren J. White, Major Professor
Department of Special Education, Counseling and Student Affairs
Bluemont Hall 369
Kansas State University
Manhattan, KS 66502

Email: research participation to faculty who received email by colleague forward

from

Mary Jo Anderson <mja6868@ksu.edu>
to referred@university.edu
date Mon, Nov 16, 2009 at 10:01 PM
subject doctoral research participation
mailed-by gmail.com

Department
University
Education Building, Room Number
Address
City, State xxxxx

Dear Dr. Faculty:

I understand that Dr. Colleague forwarded you the link to my survey. I am convinced, after working in general education, elementary education and as a faculty member in a pre-service teacher training program, that it is information the field needs. I would sincerely appreciate your participation in this study. Please let me know if you have any questions. Thank you very much.

Sincerely,

Mary Jo Anderson, Doctoral Candidate
Dr. Warren White, Major Professor
Department of Special Education, Counseling, and Student Affairs
369 Bluemont Hall
Kansas State University
Manhattan, KS 66506

Email: research participation thank-you/reminder

from
Mary Jo Anderson <mja6868@ksu.edu>
to person@university.edu
date Mon, Dec 14, 2009 at 5:36 PM
subject research participation thank-you/reminder
mailed-by gmail.com

Department Chair
Department of Teacher Education
University Hall
University of State
City, State xxxxx

Dear Dr. Person:

Recently you received a web questionnaire seeking your expertise to help with a study of special education requirements in general education teacher training programs across the United States.

If you have already completed the survey or directed us to another more suitable respondent/faculty member, please accept our sincere thanks. If you have not, please will you do so? You may access the survey by *clicking here.* We are so grateful for your help because it is only by asking individuals like you that we can gain important insights that support current programs and can provide data to inform revisions to current training.

If you need or prefer a paper copy of this survey please will you notify me and I will send one in the mail. We sincerely appreciate your participation in this study. Please let us know if you have any questions.

Sincerely,

Mary Jo Anderson, Doctoral Candidate
Warren J. White, Major Professor
Department of Special Education, Counseling and Student Affairs
Bluemont Hall 369
Kansas State University
Manhattan, KS 66502

US Postal Mailing: in reference to postcard mailing

January 19, 2010

(*Dear Dr. Handwritten*):

Recently, a link to a web questionnaire was sent to you so that you could share your expertise about teacher preparation.

We are especially grateful to you because it is only through people like you who are willing to share your knowledge and expertise, that we can gain a better understanding about how colleges and universities in the United States prepare general education teacher candidates to teach class members with disabilities.

If you have already completed the questionnaire, please accept our sincere thanks. If you have not, please do so today by accessing the survey at this URL: https://www.surveymonkey.com/s/5WDHSWT.

Sincerely,

Signed by hand
Mary Jo Anderson, Doctoral Candidate
Dr. Warren White, Major Professor
369 Bluemont Hall
Kansas State University
Manhattan, KS 66506

Email: in reference to postcard mailing

From
Mary Jo Anderson <mja6868@ksu.edu>
to
Faculty@university.edu>
date
Thu, Feb 11, 2010 at 10:44 AM
subject
in reference to postcard: survey link
mailed-by gmail.com

Dear Dr. Respondent,

As promised in a postcard sent to you this past week, I am sending you a web link to a survey that pertains to preparing general education teacher candidates to teach students with disabilities who are members of general education classrooms.

Please click here to complete the questionnaire. When you complete it or if you already have, please let us know so that we can include your name in a drawing for a $75.00 Visa gift card. We will draw one name from the group of participants. Please be reassured that there will be no way for us to connect you with your survey responses.

Please accept our sincere thanks for sharing your expertise by participating in this research. We anticipate that the data gathered will make a significant contribution to our field.

Sincerely,

Mary Jo Anderson, Doctoral Candidate
Dr. Warren White, Major Professor
369 Bluemont Hall
Kansas State University
Manhattan, KS 66506

Cover Letter: attached to survey

Dear participant:

Children with disabilities are becoming members of general education classrooms in increasing numbers and general education teacher preparation has been identified as a critical factor in the successful schooling of these students. In an effort to learn more about how general education preservice teachers are prepared for teaching students with disabilities, we are asking you to help us by participating in a nationwide web survey.

You were selected to participate because you are part of the faculty at one of the three institutions of higher education in your state that produce the largest number of elementary education teachers. We are asking you or another faculty member, to complete a web survey that pertains to the component of your university's elementary teacher training program that prepares preservice elementary education teachers to work with and teach students with disabilities educated in general education classrooms. Questions focus on preferred knowledge and skills, recommended by the Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee of Learning Disabilities (NJCLD), for educating students with disabilities. A member of the faculty who teaches special education related knowledge and skills to general education preservice teachers would be most able to answer the questions. If you feel a faculty member other than yourself would be better suited to represent this aspect of your elementary preservice teacher preparation program, please will you forward their name and email contact to us?

Results from the survey will be used to gain a clearer understanding of preservice elementary teacher preparation in the context of classrooms in which students with disabilities receive some of their education. It will provide information to IHEs considering more comprehensive and specialized training for elementary preservice general educators and, more importantly, to inform program adjustments.

Survey answers are completely confidential and will be used for research purposes only. There will be no way to link your response to you, a given state nor to your university. While completing the survey you may withdraw at any time. If you have any questions or comments about this study or this web survey we would be happy to talk to you. Please contact us at our email addresses, mja6868@ksu.edu or wwhite@ksu.edu.

There are five sections: demographics, knowledge and skills coursework, knowledge and skills assessment, views about preservice preparation, and comments. Please complete each section by following the directions within the survey. When you have completed it, click “submit” found at the bottom of the survey. You will get an immediate confirmation from our web server.

Thank you very much for helping us with this study. Your assistance in this effort is greatly appreciated.

Mary Jo Anderson, Doctoral Candidate
Department of Special Education, Counseling and Student Affairs
Kansas State University

Warren J. White
Professor of Special Education
Department of Special Education, Counseling and Student Affairs
Director of Assessment
Kansas State University

Appendix E - Questionnaire

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

Dear participant:

Children with disabilities are becoming members of general education classrooms in increasing numbers and general education teacher preparation has been identified as a critical factor in the successful schooling of these students. In an effort to learn more about how general education preservice teachers are prepared for teaching students with disabilities, we are asking you to help us by participating in a nationwide web survey.

You were selected to participate because you are part of the faculty at one of the three institutions of higher education in your state that produce the largest number of elementary education teachers. We are asking you or another faculty member, to complete a web survey that pertains to the component of your university's elementary teacher training program that prepares preservice elementary education teachers to work with and teach students with disabilities educated in general education classrooms. Questions focus on preferred knowledge and skills, recommended by the Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Joint Committee of Learning Disabilities (NJCLD), for educating students with disabilities. A member of the faculty who teaches special education related knowledge and skills to general education preservice teachers would be most able to answer the questions. If you feel a faculty member other than yourself would be better suited to represent this aspect of your elementary preservice teacher preparation program, please will you forward their name and email contact to us?

Results from the survey will be used to gain a clearer understanding of preservice elementary teacher preparation in the context of classrooms in which students with disabilities receive some of their education. It will provide information to IHEs considering more comprehensive and specialized training for elementary preservice general educators and, more importantly, to inform program adjustments.

Survey answers are completely confidential and will be used for research purposes only. There will be no way to link your response to you, a given state nor to your university. While completing the survey you may withdraw at any time. If you have any questions or comments about this study or this web survey we would be happy to talk to you. Please contact us at our email addresses, mja6868@ksu.edu or wwhite@ksu.edu.

There are five sections: demographics, knowledge and skills coursework, knowledge and skills assessment, views about preservice preparation, and comments. Please complete each section by following the directions within the survey. When you have completed it, click "submit" found at the bottom of the survey. You will get an immediate confirmation from our web server.

Thank you very much for helping us with this study. Your assistance in this effort is greatly appreciated.

Mary Jo Anderson, Doctoral Candidate
Department of Special Education, Counseling and Student Affairs
Kansas State University

Warren J. White
Professor of Special Education
Department of Special Education, Counseling and Student Affairs
Director of Assessment
Kansas State University

Section A: DEMOGRAPHICS

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

Please respond to the questions below by checking the one response for each question that applies most closely to your university and elementary education teacher-training program.

1. What is your faculty position?

- ◯ Instructor/Lecturer
- ◯ Associate Professor
- ◯ Assistant Professor
- ◯ Professor
- ◯ Other (please specify in the space provided)

2. Do you have any faculty leadership role(s)? If so, please indicate your role in the space provided.

3. On average, how many licensure eligible elementary teacher program completers does your university have each year?

4. Does your institution have a degree program that prepares *special education* teachers for state licensure?

- ◯ yes
- ◯ no

5. Are special education trained faculty teaching the required special education coursework in your *general education* elementary preservice teaching program?

- ◯ yes
- ◯ no
- ◯ N/A (no separate special education coursework is required in our program)

Section B: KNOWLEDGE AND SKILLS COURSEWORK (TEACHING)

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

6. Does your program require special education courses for elementary general education teacher program completers that exceed the number of courses required by your state department of education? Please check one.

- ◯ No
- ◯ 1 additional course
- ◯ 2 additional courses
- ◯ 3 additional courses
- ◯ 4 or more additional course
- ◯ Other, please explain in the space provided below.

7. According to the following statements, how would you describe the way *all* elementary general education preservice teachers are prepared (at your institution) with respect to knowledge and skills specific to teaching and working with disabled students? Check all that apply.

- ☐ Our elementary general education teacher-training program does not require nor include content (knowledge and skills) about teaching and working with students with disabilities who are members of general education classrooms (You will be taken to question #11)
- ☐ Our elementary general education teacher candidates learn knowledge and skills about teaching students with disabilities through content infused into other required courses.
- ☐ Our elementary general education teacher candidates have an opportunity to learn knowledge and skills specific to teaching students with disabilities by choosing a special education course(s) as an elective(s).
- ☐ Our elementary general education teacher candidates learn knowledge and skills about teaching students with disabilities through a specific required course(s) designed for that purpose.
- ☐ Our elementary general education teacher candidates learn specific knowledge and skills relating to teaching students with disabilities during their clinical experiences (i.e. student teaching)
- ☐ Other—please explain by typing in your response in the space provided below.

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

8. Do you include any content related to educating students with disabilities in elementary general education classrooms in the courses *you* teach? Please check all that apply.

☐ Yes, in courses designed specifically to teach elementary general education teacher candidates about students with disabilities who are educated in general classroom settings.

☐ Yes, I teach content related to educating students with disabilities in elementary general education classrooms in courses other than those specifically designed to cover that content (i.e., methods courses)

☐ No (You will be taken to item #25)

*If you answered *yes* to this question, please list the course(s), by name, that include special eduction content or any courses specifically designed to teach special eduction content to elementary education teacher candidates. Please respond by tying in the space provided below:

TEACHING

Look at the knowledge/skill area listed at the beginning of each row in the matrix below. Please indicate the HIGHEST LEVEL according to Bloom's taxonomy, at which the knowledge/skill is TAUGHT in the elementary education teacher training program at your university. You may refer to the indicators from Bloom's taxonomy that are described below. Click here to access a copy the definitions of knowledge/skill areas for your reference. You may print them for your convenience if you so choose. In each row, click on the circle in the one column that represents your answer.

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

9. Bloom's Taxonomy

Remembering /Knowledge: -- Can the student recall or remember the information (e.g. define, duplicate, list, memorize, recall, repeat, reproduce state)?

Understanding /Comprehension: -- Can the student explain ideas or concepts (e.g. classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase)?

Applying /Application: -- Can the student use the information in a new way (e.g. choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write)?

Analyzing/Analysis: -- Can the student distinguish between the different parts (e.g. appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test)?

Evaluating /Synthesis: -- Can the student justify a stand or decision (e.g. appraise, argue, defend, judge, select, support, value, evaluate)?

Creating /Evaluation: -- Can the student create a new product or point of view (e.g. assemble, construct, create, design, develop, formulate, write)?

	NOT TAUGHT	REMEMBERING	UNDERSTANDING	APPLYING	ANALYZING	EVALUATING	CREATING
a. policy and legislation	○	○	○	○	○	○	○
b. characteristics	○	○	○	○	○	○	○
c. IEP process	○	○	○	○	○	○	○
d. IEP assessment	○	○	○	○	○	○	○
e. instruction	○	○	○	○	○	○	○
f. instructional and assistive technology	○	○	○	○	○	○	○
g. social development	○	○	○	○	○	○	○
h. teaching strategies	○	○	○	○	○	○	○
i. behavior management	○	○	○	○	○	○	○
j. collaboration	○	○	○	○	○	○	○
k. accommodations	○	○	○	○	○	○	○

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

l. support services	○	○	○	○	○	○	○

Section C: KNOWLEDGE AND SKILL ASSESSMENT (ASSESSMENT)

Look at the knowledge/skill area listed at the beginning of each row in the matrix below. Please indicate the HIGHEST LEVEL according to Bloom's taxonomy, at which the knowledge/skill is ASSESSED in the elementary education teacher training program at your university. You may refer to the indicators from Bloom's taxonomy that are described below. Click here to access a copy the definitions of knowledge/skill areas for your reference. You may print them for your convenience if you so choose. In each row, click on the circle in the one column that represents your answer.

10. Bloom's Taxonomy

Remembering /Knowledge: -- Can the student recall or remember the information (e.g. define, duplicate, list, memorize, recall, repeat, reproduce state)?

Understanding /Comprehension: -- Can the student explain ideas or concepts (e.g. classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase)?

Applying /Application: -- Can the student use the information in a new way (e.g. choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write)?

Analyzing/Analysis: -- Can the student distinguish between the different parts (e.g. appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test)?

Evaluating /Synthesis: -- Can the student justify a stand or decision (e.g. appraise, argue, defend, judge, select, support, value, evaluate)?

Creating /Evaluation: -- Can the student create a new product or point of view (e.g. assemble, construct, create, design, develop, formulate, write)?

	NOT ASSESSED	REMEMBERING	UNDERSTANDING	APPLYING	ANALYZING	EVALUATING	CREATING
a. policy and legislation	○	○	○	○	○	○	○
b. characteristics	○	○	○	○	○	○	○

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

c. IEP process	◯	◯	◯	◯	◯	◯	◯
d. IEP assessment	◯	◯	◯	◯	◯	◯	◯
e. instruction	◯	◯	◯	◯	◯	◯	◯
f. instructional and assistive technology	◯	◯	◯	◯	◯	◯	◯
g. social development	◯	◯	◯	◯	◯	◯	◯
h. teaching strategies	◯	◯	◯	◯	◯	◯	◯
i. behavior management	◯	◯	◯	◯	◯	◯	◯
j. collaboration	◯	◯	◯	◯	◯	◯	◯
k. accommodations	◯	◯	◯	◯	◯	◯	◯
l. support services	◯	◯	◯	◯	◯	◯	◯

Section D: VIEWS ABOUT PRESERVICE PREPARATION

11. The knowledge and skills topics (learning strategies, characteristics, instruction, IEP process, IEP assessment, accommodations, support services, instructional and assistive technology, behavior management, social development, collaboration with special educators, community services, parents, students) are recommended by INTASC and NJCLD as preferred competencies for preservice general education teachers. Do you think it is reasonable to require elementary education teacher candidates to acquire all of these skills in their preservice preparation programs? Please respond by checking either "yes" or "no." Click here to access a copy the definitions of knowledge/skill areas for your reference. You may print them for your convenience if you so choose.

◯ Yes

◯ No

12. Please provide rationale (why or why not) for your response to question #12 by typing your thoughts in the space provided.

For questions 13 - 16, please respond by *checking the one response* under each item that best describes your opinion of your university's general education preservice program. **The average preservice elementary education teacher program completers from my institution .....**

13. know enough about special education policy and legislation relating to general education teachers' responsibilities to provide opportunities for children with disabilities as stated by IDEA, 2004.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

14. have learned enough about learning strategies designed to help them teach students with disabilities so that these strategies will be an integral part of their teaching day.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

15. have learned enough about methods and techniques for instructing students with disabilities that they consider them while planning and use them to teach the students with disabilities in their classrooms.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

16. have a deep enough understanding about the IEP meeting process that they can participate with confidence.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

For questions 17- 20 please respond by checking the one response under each item that best describes your opinion of your university's general education preservice program. **The average preservice elementary education teacher program completers from my institution .....**

17. have learned enough about responsibilities pertaining to their specific roles in the implementation of an IEP that they do so sufficiently well according to IDEA law.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

18. have learned enough about special education related services and supplementary aids and services (e.g. occupational therapy, physical therapy, adaptive physical education, assistive technology, etc) available to help the student with disabilities that they know who to seek help from in a variety of special needs related situations.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

19. have learned enough about instructional and assistive technology designed to help them teach students with disabilities that they can recognize when it is needed for students.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

20. have learned enough about collaboration techniques that they can work successfully as team members with special educators, other teachers, parents, and community agencies regarding the child with disabilities.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

For questions 21 and 22 please respond by checking the one response under each item that best describes your opinion of your university's general education preservice program. **The average preservice elementary education teacher program completers from my institution .....**

21. have learned enough about special behavior management techniques that they can implement them while working with students with disabilities in their classrooms.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

22. have learned enough about social development (e.g., characteristics of social development of students with disabilities, initiating conversations, taking turns, asking for help, listening in social situations, not interrupting, etc.) to use techniques that will foster age appropriate social development in students with disabilities.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Unsure
- ◯ Disagree
- ◯ Strongly Disagree

23. Throughout this survey you have responded to questions regarding preferred skills for elementary education teachers that have been suggested by INTASC and NJCLD. Please list any other skills you believe are needed by elementary education teachers in order to work with and teach students with disabilities who are educated in general education classrooms. Please type your answers in the space provided below.

24. Based on your participation thus far, there is no need to respond to question #25 so please click on the circle in front of the response below to be taken to the final survey item.

- ◯ skip to # 26

STUDENTS WITH DISABILITIES IN GENERAL EDUCATION

25. Since you are not a faculty member who teaches special education knowledge and skills in your classes, please provide the name of a special *or* elementary general education faculty colleague who teaches special education knowledge and skills to *elementary education preservice teachers* and his/her contact information. A survey about what your program does to prepare elementary education preservice teachers for teaching students with disabilities will be sent to that faculty member to complete. We've provided space below for your responses.

name of faculty member

faculty member email

faculty member phone number

Section E: COMMENTS

26. Thank you for taking the time to complete this questionnaire. Your assistance in providing this information is very much appreciated. If there is anything else you would like to tell us about a particular question, this survey, your university and/or about preservice preparation for elementary general education teachers pertaining to the context of classrooms in which students with disabilities receive some of their education please do so in the space provided below.

Appendix F - INTASC and NJCLD Skills Linked to Survey

1. **Characteristics:** The Individuals with Disabilities Education Act (IDEA) defines thirteen disability categories; the teacher candidates have broad knowledge of the disabilities and how various manifestations of these disabilities can affect development and school performance. Teacher candidates recognize individual variations in learning that exceed the typical range and have a basic understanding of the impact of the disability on school functioning.

2. **Policy and legislation:** Teacher candidates are taught about policy and legislation that established legal procedures and requirements as well as the framework for educating students with disabilities. Teacher candidates have knowledge of legal rights of students with disabilities and their parents or guardians. Teacher candidates are taught legal responsibilities and procedures of teachers and schools regarding special education and services.

3. **IEP process:** Teacher candidates have learned about child study teams, multidisciplinary teams that focus on identification and placement, and IEP and Individual Family Service Plans (IFSP) teams. Candidates are taught the sequence and requirements of the process of identifying students with disabilities. Teacher candidates are taught how to read an IEP or IFSP, the meanings of them as legal documents, and are taught about their roles in the IEP process from child study, special education referral, to IEP implementation and progress documentation.

4. **IEP Assessment:** Teacher candidates are taught about their role in identifying students with special needs and are exposed to assessment tools to commonly used by general educators in that process. For example, teacher candidates are taught how to identify and document students' strengths and weaknesses through measures such as interviews, observations, and collecting student work. Candidates know how to participate in functional behavior assessments. Teacher candidates are taught to use ongoing evaluation and results to inform teaching adjustments and student accommodations including testing accommodations to meet needs of students with disabilities.

5. **Instruction:** General education preservice teachers are taught a variety of teaching techniques and methods designed to enable him/her to develop and implement lesson plans that meet the unique needs of students with disabilities. The teacher candidate has been taught to adhere to the IEP to plan and to implement instruction by collaborating with special ed. teachers. Teacher candidates know how to make program adjustments (accommodations or modifications) to meet the needs of students with disabilities and are taught how to integrate students with disabilities into the academic and social community of the classroom.

6. **Instructional and Assistive technology:** Teacher candidates are taught to use technology to promote learning and communication in general education classrooms. The teacher candidate has been taught how to use assistive technology (AT) as a means to provide equitable access to students with disabilities. Teacher candidates are taught about the most common AT devices and are taught how students with disabilities can use them to participate and to access curriculum. Teacher candidates are taught how to adapt technology to meet the needs of students with disabilities (e.g. using accessibility functions built in to the computer or using text reading programs to read computer text to a student who cannot read).

7. **Social development:** Teacher candidates are taught the importance of modeling respect and acceptance of students with disabilities. Teacher candidates are taught ways to facilitate participation of all students with disabilities in large and small group interaction within general education settings. They are taught how to provide opportunities for meaningful, ongoing social interaction between students with and without disabilities. Candidates are taught the importance of *recognizing* and *reinforcing* student successes whether large or small.

8. **Teaching Strategies:** Teachers are taught a repertoire of instructional strategies, including content specific strategies, assessment techniques, and accommodations to meet the needs of all students including students who have disabilities, and can apply them when needed. Teachers are taught about universally designed instruction as a means to reach all students, including students with disabilities in their classrooms. Teachers are taught how to use self-reflection and consequently to recognize needed changes in their plans, methods, etc.

9. **Behavior Management:** Teacher candidates are taught various classroom management techniques that assist students with disabilities with self-regulation. Teacher candidates are taught methods, strategies and techniques that will enable them to provide a safe, positive classroom learning environment for all students including students with behavior disorders. Teacher candidates are taught the implications of positive and negative verbal and non-verbal messages they may convey to students with disabilities during instruction and the potential positive and negative effects it may have on self concept and motivation.

10. **Collaboration:** Candidates are taught how to contribute their expertise to a team of professionals who develop, monitor and revise education plans. Teacher candidates are taught ways to establish and maintain effective collegial relationships with families, school, and community in educating children with disabilities. Candidates are taught how to work with relevant colleagues to plan ongoing learning experiences that maximize disabled students' participation and learning in general education settings. Candidates are taught how to promote positive, collaborative attitudes toward individuals with disabilities and their families.

11. **Accommodations:** Teacher candidates are taught that some students with disabilities may need accommodations or expanded curriculum with modifications and learning goals that differ from general curricular goals. Teacher candidates are taught about the continuum of special education placements and services and how to recognize when a more or less restricting placement might need to be considered; Candidates are taught how to adapt instruction according to unique student needs. The teacher candidate has been taught to be aware of and to monitor external factors, i.e. noise, traffic patterns, seating, pace of instruction, size of groupings.

12. **Support Services:** Teacher candidates are taught about support services outlined by IDEA for students with disabilities. Candidates are taught that support services are an integral part of the education program for a student with disabilities. Candidates are taught the purposes of support services and support service roles in team decision-making. Teacher candidates are taught about the functions of community agencies and programs and their role of working with other professionals to ensure parents have access to these services that will help the educational progress of a student with disabilities.

*Accessed by survey respondents at http/www.mjoanderson.9f.com

Interstate New Teacher Assessment and Support Consortium (2001, May). *Models standards for licensing general and special education teachers of students with disabilities: A resource for state dialogue.* Washington, DC: Council of Chief State School Officers.

National Joint Committee on Learning Disabilities. (1998). Learning disabilities: Preservice preparation of general and special education teachers. *Asha, 40 (Suppl. 18)*, in press.

Appendix G - Special Education Requirements for General Education Teachers

Table G.1: Special Education Requirements for General Education Teachers

Special Education Requirements	Frequency	Percentage
State SpEd Requirement for General Education Teachers		
None	8	15.7
Specific Class (includes 1 state that requires 2 classes)	12	23.5
Infused Through Outcome Standards	26	51.0
Unable to Locate	5	9.8
IHE required *Additional* SpEd Coursework		
No Additional Coursework	39	56.5
1 Additional Course	15	21.7
2 Additional Courses	4	5.6
Other	15	21.7

Table G.2: Additional Special Education Coursework: Qualitative Responses to Response Choice, "Other"

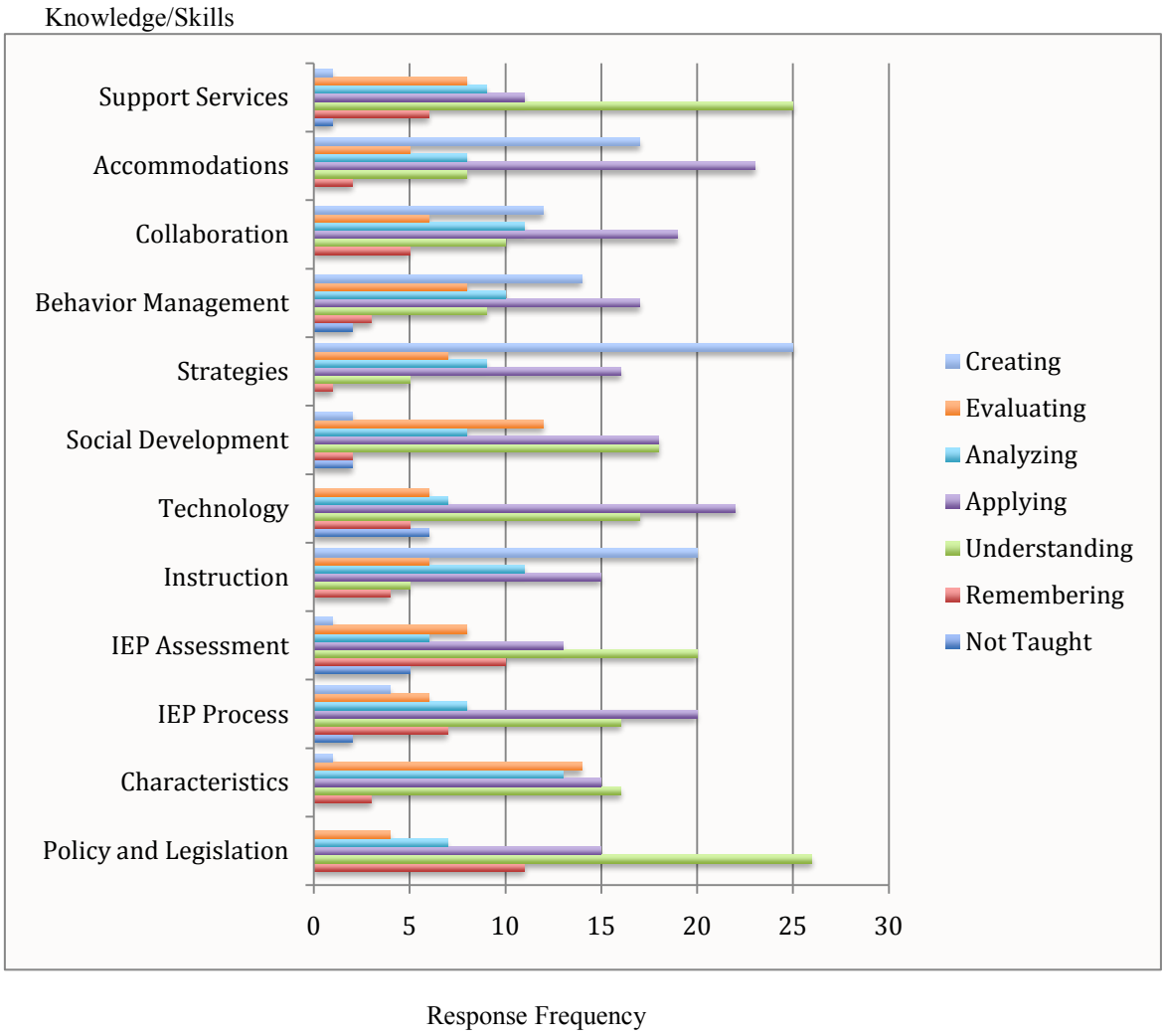
Comments/Text
• "People who are special ed certified are also el certified"
• "Several apply – we require courses, we offer electives and we infuse throughout all professional coursework"
• "We have opened the first 9 hours of our graduate Adaptive SpEd program to students starting in their junior year. Upon graduation, candidates electing to complete these courses can have provisional endorsement upon graduation."
• "Our elementary general education teacher candidates are required to take a course focusing upon teaching students with special needs. They also complete the entire set of CHAMPs modules to learn how to help all students make good behavioral choices. Furthermore, every methods course integrates information about meeting students' special needs."
• "Students may also take additional coursework in special education after they take the required foundation course."
• "Pre-service teachers are placed in public schools where students with disabilities are included. Their participation in pre-referral, referral and IEP development varies based on their placements. While the required special education occurs early on in students' programs, it does prepare pre-service teachers to problem solve and think about their role. Pre-service teachers are also introduced to differentiated instruction in their methods courses, preparing them to look at individual needs. That said, there is room for extending competencies with regard to collaboration and approaches to direct instruction,

modifications/academic and behavioral interventions."

- "We have a unified general and special education certification program options for elementary and secondary education. Candidates complete requirements for recommendation for both the certificates and a Master's degree within a coordinated curriculum."
- "We have an elementary program in which students take one course regarding special education. However, we also have an integrated elementary/special education program in which students take all courses needed for both an elementary and special education license."
- "the course mentioned in not high quality. It's a course that we designated as having the "basics" of Special Education."
- "All elementary ed candidates are required to take one course (meeting the needs of diverse learners) related to teaching students with disabilities. The only way to gain additional knowledge is to select a special education minor."
- "In addition to the specific course and application in student teaching we have the applications for diverse learners course in the previous item."
- "20 hour field experience during the one special education course.

Appendix H - Highest Level to Which Knowledge is Taught

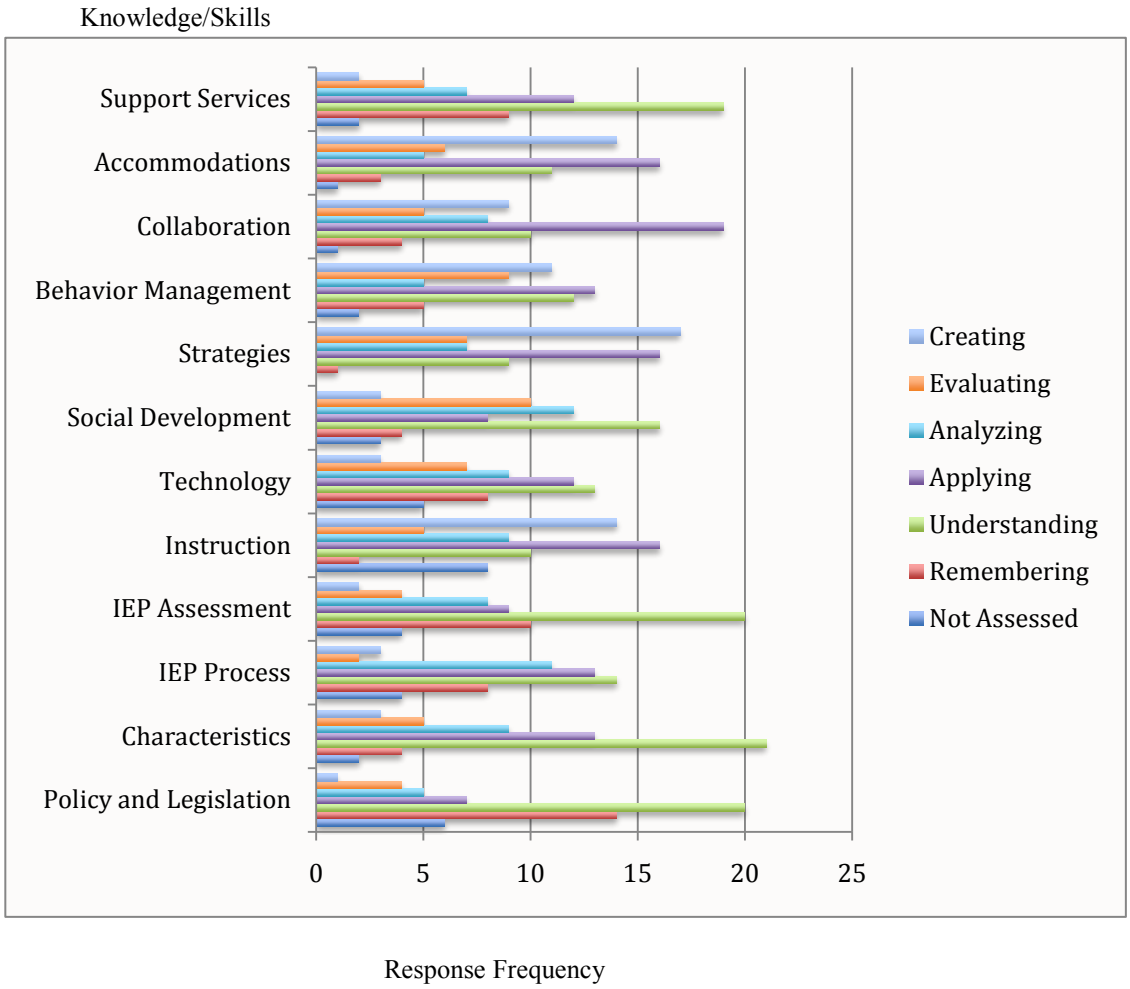
Figure 1: Highest Level At Which Knowledge/Skills are Taught



Note: Skills referred to are those recommended for preservice general education teachers who work in classroom that include students with disabilities.
Levels are from an updated version of Blooms Taxonomy updated (Anderson, L.)

Appendix I - Level at Which Knowledge is Assessed

Figure 2: Highest Level at Which Knowledge/Skills are Assessed



Note: Skills referred to are those recommended for preservice general education teachers who work in classroom that include students with disabilities.
Levels are from an updated version of Blooms Taxonomy updated (Anderson, L.)

Appendix J - Level at Which Knowledge and Skills are Taught and Assessed Based on Bloom's Taxonomy

Figure 3: Highest Level Preferred Knowledge/Skills Are Taught

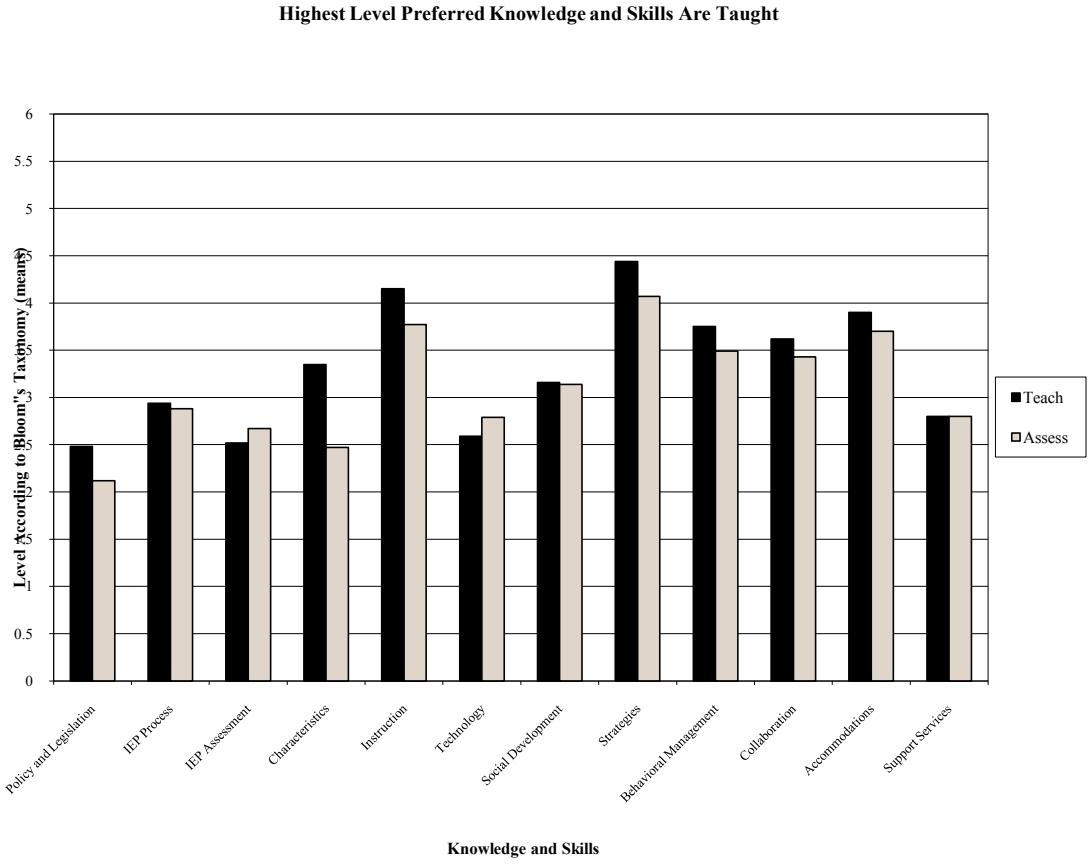


Figure 1. Values for "Level According to Bloom's Taxonomy" represent a hierarchy of ordered categories. The numbers are dummy codes and **do not represent intervals**: 0) Not Taught or Assessed, (1) Remembering, (2) Understanding, (3) Applying, (4) Analyzing, (5) Evaluating, (6) Creating. Values shown on this graph are, only for the purpose of this graphical illustration, means.

Appendix K - Rationale for Opinion about Reasonable Special Education Requirements for General Education Teachers

Survey question 11: *The knowledge and skills topics (learning strategies, characteristics, instruction, IEP process, IEP assessment, accommodations, support services, instructional and assistive technology, behavior management, social development, collaboration with special educators, community services, parents, students) are recommended by INTASC and NJCLD as preferred competencies for preservice general education teachers. Do you think it is reasonable to require elementary education teacher candidates to acquire all of these skills in their preservice preparation programs? Please respond by checking either "yes" or "no."*

Survey question 12: *Please provide rationale (why or why not) for your response to question #12 by typing your thoughts in the space provided.*

The response and the rationale provided are included below. First, the rationale from individuals who responded "yes" are documented and then those who indicated "no."

1. Yes-N/A
2. Yes-I think they can all be introduced, but it will take experience in the classroom for true understanding and application--including analyzing and evaluating and creating.
3. Yes-General educators will have students with disabilities in their classrooms, so these skills are necessary
4. Yes-Every teacher should be able or at least comfortable teaching every child
5. Yes-We are required to have a 120 hour degree with emphasis on the content areas. We simply can not satisfy everyone's definition of a desirable candidate in so few classes.
6. Yes-Good teachers teach children - every child.

7. Yes-Its reasonable, actually essential, given the ever widening classroom learning cultures in the U.S. today. However, it will require a closer integration of SPED and Ele. Ed. and by definition a changing of emphasis in the Ele. Ed curriculum (e.g., more SPED infusion will mean sates will have to move some other course work to elective status as politically there is little interest in increasing overall program hours by simply adding courses). This can be done through better integration of course work, but again, policymakers who make mandated requirements for approved state programs must be better educated. In this state its unclear who will do that work as politically teacher educators are not invited to this discussion.
8. Yes-All share in the responsibility of providing appropriate instruction - all should be involved in the planning and implementation of the IEP
9. Yes-All the children in their future classrooms have the right to a FAPE.
10. Yes-All areas listed are part of the lives of general ed teachers today
11. Yes-We need to equip them with as much knowledge and skills as possible within the undergraduate venue. Some items, however, such as collaboration and working with parents, would be limited to just the student teaching semester.
12. Yes-General Education teachers are and should be responsible for the education of all students
13. Yes-Classroom teachers are responsible for the learning of all students –
14. Yes-Yes, I believe it is reasonable. However, colleges of education can be restricted on the number of credits in the teacher education program especially if students have a liberal arts major requirement. It is hard to do it all in an undergraduate program. However, openness to continue to learn and to acknowledge the importance of being a

teacher to all students sets them on the track of openness and willingness to learn more in their field experiences.

15. Yes-They will have mainstreamed special ed kids. But on the 2 previous questions, I am guessing at the answers because I don't teach the special ed course.
16. Yes-Because in all general education classrooms there are students with disabilities and the teachers should be skilled at teaching all students.
17. Yes-It is reasonable and important yet very difficult in Texas where we are limited to 24 credit hours of teacher education (including student teaching). The level to which students "acquire" these skills is not high enough--we can only get them to the understanding stage in some areas.
18. Yes-Because of restraints of the number of hours students may take to graduate (by the State), it is not feasible at present for ALL students to be competent in all areas. We have many dual majors who are. However, most elementary education just take the introduction course to special education and will only have a general understanding.
19. Yes-any teacher is likely to be teaching students with disabilities regardless of their teaching assignment in elementary school.
20. Yes-Certainly all teachers should know how to work with children with special needs - whether they are "Officially" documented or not. Perhaps the distinction here should be to the level of application verses specialization - Regular elementary teachers should know and understand Sp. Ed. topics to a point - but then at some point the Sp. Ed. teacher should take over or assist as that is the specialty of that educator.
21. Yes-With inclusion being used more often in public schools, general ed teachers need to have knowledge of the process and requirements.

22. Yes-Elementary educators will have students with disabilities in their classes from the first day and will need to be able to plan for, teach and manage them independently.
23. Yes-Xxxxxxxx
24. Yes-If they are only required to know & understand, then I agree. However, it would take additional classes than I teach for them to apply (or synthesize/evaluate) these skills.
25. Yes-This will be a basis of their classroom teaching. Knowing how to use differentiated instruction and other starategies will be key to their success. Collaboration is now the "name of the game."
26. Yes-Issues they will fzce in their classrooms
27. Yes-Candidates in Elementary Education will have students with disabilities in their classrooms. They need to be equal partners in their education.
28. Yes-Please note:Bloom's Taxonomy does not have a "creating" category. This is a later authors addition based on a misunderstanding of what Bloom said. See" Benamin S. Bloom, Taxonomy of Educational Objectives: Book 1 Cognitive Domain, Longman, 1956.
29. Yes-All ELED teachers will work with students with special needs. Questions only arise in terms of the length of a preparation program needed to truly prepare individuals well across all necessary areas. What we require of teachers has grown beyond the four-year timeframe.
30. Yes-Even regular education teachers will be working with special education students on a regular basis, they need to know as much as possible about the special education field and the students.
31. Yes-We need to equip them with all the knowledge we can to facilitate their efforts once

they enter a real classroom. However, realistically, they won't necessarily have proficiency right away.

32. Yes-Special education students are included in the regular classroom population, not pulled out
33. Yes-We must produce teachers who can teach all children and all children have special needs in one way or another
34. Yes-Teachers are faced with teaching a diverse group of students and must be prepared to do so.
35. Yes-General Education needs the skills to work with ALL students who are placed in their classrooms, those diagnosed with disabilities, those who have not yet been diagnosed and those who are reportedly average. A solid back ground in special education philosophies and skills will only strengthen the teacher.
36. Yes-Difficult to serve students with exceptional needs without understanding listed content. Skills, knowledge and strategies emphasized in IEP can be applied to wider population of students.
37. Yes-Our teacher candidates are expected to teach students with special needs in the regular classroom setting.
38. Yes-Given an inclusion model, elementary educaiton majors need to be able to accommodate the needs of all children in their classrooms
39. Yes-Intasc standards
40. Yes-Because of the inclusion model that is currently used in elementary classrooms.
41. Yes-A basic awareness and level of use in all these areas is needed in order to function as a beginning elementary teacher.

42. Yes-All teachers will work with students with special needs, and they need to be prepared to do so. . .
43. Yes-The vast majority of our students will be working in inclusive settings. If they are going to teach so that "all children can learn," they need the knowledge and skills to do that.

Subjects who responded that it is not reasonable to have elementary general education teacher candidates acquire all of the 12 preferred knowledge and sills referred to throughout this investigation have provided their rational as quoted below

1. No-Because it requires application and there is not the context to do that even in student teaching
2. No-I believe it's a reasonable idea and we should implement such a program but our current program is too much. We need to rethink our courses and design a new program - something that both elementary and special education would design together.
3. No-Developing a facility with these skills will aid the classroom teacher in working with special education students but all students. But there is only some much time to learn to do so many things. There is a trade off in time between understanding and the knowledge and skill and acquiring the skill at a mastery level.
4. No-The "regular" classroom teacher needs to understand effective teaching strategies for exceptional learners, however, at the undergraduate level...it is important to teach future teachers effective practices for collaborating with special education teachers.
5. No-To aquire all of the skills is a little unreasonable based upon the amount of coursework being required of them without a lot of opportunity to process through application.

6. No-I agree that the majority of the topics should be a required component. I do not think all of them should be required unless they are being dual endorsed in elementary education and special education.
7. No-There is so much to learn as part of a preservice teaher. I think general educators should be made aware of these concepts but I do not think they would be able to apply the skills of such things as IEP process and assessment, support services and community services (even special education majors have trouble remembering them). Awarness is reasonable
8. No-we have a very large program -- probably about 2500 teacher education candidates (probably about 1500 - 1800 elementary). Requiring all candidates to acquire these skills would present significant challenges
9. No-Given the constraints placed on IHE in Virginia which require all individuals wishing to obtain licensure to teach to complete an interdisciplinary studies degree with a limited number of hours spent in education course, we would not be able to comply with all of these recommended/preferred competencies.
10. No-They are working on enough competencies to teach all
11. No-Pre-service teachers need real classroom experiences to develop these skills. Fresh graduates, no matter how much field experience they've had, do not have the real life experiecnes needed to fully develop these skills.
12. No-Despite a required class in special education and integrated special education content in many elementary courses, the majority of our students still feel unprepared to work with students with disabilities in the classroom. I think they gain that confidence with hands-on experience in the classroom, not through more book learning.

13. No-The programs are already so large that adding enough courses to have these skills would be a difficult task.
14. No-In order to cover every aspect of every need, the students would not be exiting the university in a timely manner. A basic awareness is critical but not to the depth that is being asked here.

*One person did not provide a “yes” or “no” response, nor did he or she provide rational, but responded “N/A.”